PERCEPTION OF CONSTRUCTION PROFESSIONALS ON ATTRIBUTES OF PROJECT SPONSORS AND CONCESSIONAIRES OF PUBLIC PRIVATE PARTNERSHIP PROJECTS IN NIGERIA

BY

Hauwa HASSAN

DEPARTMENT OF BUILDING,

AHMADU BELLO UNIVERSITY, ZARIA

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BY

HAUWA HASSAN (A.B.U. 2001)
M.Sc/Const. Mgt/P13VBD8112

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DEPARTMENT OF BUILDING,
FACULTY OF ENVIRONMENTAL DESIGN
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DECEMBER, 2016

DECLARATION

I declare that the work in this project Thesis entitled "PERCEPTIONS OF CONSTRUCTION PROFESSIONALS ON ATTRIBUTES OF PROJECT SPONSORS AND CONCESSIONAIRES OF PUBLIC PRIVATE PARTNERSHIP PROJECTS IN NIGERIA" has been carried out by me in the department of Building. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this project thesis was previously presented for another degree or diploma at this or any other institution.

HAUWA HASSAN _____ _____

Signature Date

CERTIFICATION

The project thesis entitled PERCEPTIONS OF CONSTRUCTION PROFESSIONALS ON ATTRIBUTES OF PROJECT SPONSORS AND CONCESSIONNAIRES OF PUBLIC PRIVATE PARTNERSHIP PROJECTS IN NIGERIA byHauwa Hassan meets the regulations governing the award of the degree of master science construction management of the Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

_____ Date _____

Prof. I.K Zubair
Chairman, Supervisory Committee

_____ Date _____

Dr. M. Abdulrazaq
Member, Supervisory Committee

_____ Date _____

Dr. D. Kado
Head of Department

_____ Date _____

Prof. Kabir Bala
Dean, School of Postgraduate Studies

DEDICATION

This research work is dedicated to my children Rahma, Yusuf, Al'Amin and Fatima Idris.

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All praises be to God for seeing me through this hurdle for adding additional feather to my cap of academic qualifications. This success is worth being appreciated.

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ABSTRACT

Public private partnership (PPP) is a rapidly growing means of procuring infrastructure asset and their associated services. This research focused on the challenges encountered during the tendering and negotiation phase of the PPP project procurement. The aim of the study is to assess the perception of construction professionals on the attributes affecting contract negotiation of Project Sponsors and concessionaires of PPP projects in Nigeria. Following the identification of the attributes affecting contract negotiation of PPP from literature, a questionnaire survey was developed and the responses obtained were used to assess the perception of Nigerian construction professionals having some PPP experience on the relative significance of the project sponsors and concessionaires attributes based on five-point Likert rating scale from 1 "insignificant" to 5 "extremely significant", statistical analysis using SPSS 20th edition was carried on the data generated. The result showed that; appointing a dedicated bid manager, robustness of outline technical proposal, level of financial guarantees provided/proposed by the concessionaires, level of reputation enjoyed by the organization, ability to effectively establish the project parameters and ability to offer tax concession or flexible tax regime are the most influencing attributes that have significant bearing on the efficiency of pre-contract processes. Whilst there was broad agreement on the ranking of importance for the various descriptive attributes, differences between the sectors are revealed relating to organizational nature and strength, organizational capabilities, technical capabilities and financial capabilities of the parties. This implies that these attributes may serve as a good baseline to both project sponsors and concessionaire in the negotiation of PPP projects which in effect may reduce the

misunderstanding that arise during the tendering and negotiation processes. The study concludes that a better understanding of what is important to each party in the negotiation is an important step in improving the PPP process.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

In response to facing inadequate public financial status and increasing demand on infrastructure facilities, many governments worldwide are exploring new infrastructure procurement routes through Public Private Partnership (PPP) amongst which the Built-Operate-Transfer (BOT) type arrangements are popular option (Zhang *at el.,* 2002). As PPP offer a rapid and effective way of offsetting the cost of project and meeting immediate infrastructure needs, it became imperative for Nigerian government to embrace similar funding regimes to tackle the massive infrastructure requirements (Akintoye, 2006; Ibrahim *et al.,* 2007).

The corruption tendencies inherent in contract awards in Nigeria, is the major reason that is hindering the development and provision of infrastructure, goods and services (Oyegeke 2010). There is no better way of fighting this type of corruption than to take away the provision and running of public services from government officials. Adetola (2010) reported that "in the United Kingdom where public private partnership or Private Finance Initiative (PFI) was viewed as a natural progression to privatization that took place in the country in the 80's, it has been established that privately funded public projects make a saving of 17%. Therefore in Nigeria with lesser processes and system in public project procurement we should anticipate about 30% or more in savings, which is a significant cost saving". That is why the application of PPP in Nigeria is becoming increasingly popular for both new project (such as road constructions, market development, car parks, hostels e.t.c) and for the operation and management of old facilities.

Public Private Partnership (PPP) as defined by Adetola (2010) "is a form of contractual arrangement between a government and private entity. Through this agreement the skills and assets of both the public and private sectors are shared in delivering service or facility for the use of the general public and the risk and reward potentials in the delivery of the service is also shared. "there are different types of PPP, some of them are Private Finance Initiative (PFI), joint ventures and Build-Operate Transfer (BOT) with its other variants. "In Nigeria, the joint venture and build-Operate-Transfer (BOT) approaches appear to be the common PPP delivery mechanisms used for a variety of infrastructural projects ranging from roads, tourisms, car parks, hostel development in universities to power generation" (Ibrahim *et al.*,2006).

The entire PPP procurement may be broken into four main stages, i.e. the planning and feasibility phase, the bidding and negotiation phase, the construction phase, the operation phase and possibly the transfer and/or renegotiation stage. Because, it is from this stage that all the key players will begin to exert significant influences. Negotiation as defined by Mash (1984) in Ahadzi and Bowles (2004) " is a dynamic process of adjusting by which two parties, each with their own objectives, confer together to reach a mutually satisfying agreement on a number of common interests by converting as far as possible the issues dividing them into problems to be solve". There are number of circumstances that are typically associated with poor public private partnership contract negotiation which include contract renegotiation, delays in construction and services provision, cost overruns, failure to meet quality standard, service destruction because of dispute between the contracting partners, abandoned projects and early project termination. Therefore, the outcome of the Public Private Partnership pre-contract phase in terms of how successfully it is conducted depends on the key attributes each player brings to bear on the process and to ensure attainment of value for money.

1.2 Statement of Research Problem

Despite its international appeal, the Public Private Partnership (PPP) concept of procuring public infrastructure, there have been reported cases of problems associated with tendering and negotiation of the contract that has to do with the misunderstanding between the Project Sponsors and Concessionaire. According to Owen and Meina (1999) as reported by Ahadzi and Bowles (2004),"excessive time overruns during the pre-contract stages of PPP resulting in huge advisory cost overruns have been reported on some of the projects procured through the strategy. They also identified the contract negotiation as the critical stage during which delays are most prominent. This has been the case in Nigeria as identified by Alhassan (2010) that 52% of the commenced BOT projects between 2003-2009 in Nigeria were still at a proposal stage and stopped after the procurement process, 10.4% were completely abandoned. In short only 12.5% were successfully completed and put into operation. Existing studies, however, have failed to capture the perception of Construction Professionals on the attributes Concessionaires and Project Sponsors.

1.3 Justification of the Study

In order to maximize the attainment of value for money from PPP projects, it is necessary to critically look into the initial stage (which is the bidding and negotiation process) of PPP. Therefore, there is need for an important step towards successful PPP contract negotiation by formulating a workable and efficient methodology. According to Ahadzi and Bowles (2004), " in every negotiation interaction, whether, labour, political or contractual, there are host of influencing factors that come to play in shaping the outcome of the negotiation in terms of the time it takes to reach a satisfactory agreement including the cost to the parties". In addition to the derivable strategy, conducting this research will

provide an addressed step at the bidding and negotiation stage that will reduce the problems stated in the previous section and hence its effective implementation in Nigeria. There is also the need to focus on the parties to the negotiation, the Concessionaires and Project Sponsors, so as to identify those key attributes that need to be worked on in order to improve their respective skills in pushing through to speedier but satisfactory negotiations.

1.4 Aim and Objectives

1.4.1 Aim

The study aims at assessing the perception of Construction Professionals on the attributes of Project Sponsors and Concessionaires of PPP Projects with a view to improving the understanding between them.

1.4.2 Objectives

The objectives are to;

1. To determine the level of significance of the attributes of Project Sponsors and Concessionaires.
2. To explore the basic differences in the perception between the public and private sector on the relative significance of the attributes.
3. To determine the effect of respondent's type of Organization on the attributes of the two sectors.

1.5 Scope and Limitations

1.5.1 Scope

The scope of this research was centered around assessing the attributes of Project Sponsors and Concessionaires affecting bidding and negotiation of PPP concession in

Nigeria. The target population were construction professionals having some PPP experience within Kaduna metropolis.

1.5.2 Limitations

1. The number of Professionals who have been directly involved in at least one PPP project and experienced enough in that field are limited.
2. Attitude of the respondents in filling the questionnaires.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Preamble

According to Ibrahim *et al.* (2007) governments increasingly rely on the private sector for the financing and development of infrastructure projects, due to shrinking public financial resources and lending by governments and multilateral lenders. The private sectors ability to mobilize resources and enhance efficiency has further stimulated the market for infrastructure projects that are owned and operated by the private sector.

PPP can be said to be a cross over from the normal contracting of projects to private personnel to develop a particular project which the government will pay such a private personnel for the provision of such projects and which may not later be fully completed. The essence of is to ensure to the successful development of infrastructure by the contribution and collaboration of both public and private sectors.

Afolabi (2011) described the origin and history of PPP, its importance e.t.c. The idea of PPP arose due to pressure to change the standard model of public procurement which arose initially from concerns about the level of public debt, which grew rapidly during the macroeconomic dislocation of the 1970's and 1980's. Governments sought to encourage private investment in infrastructure, initially on the basis of accounting fallacies arising from the fact that public account did not distinguish between recurrent and capital expenditures.

He also stated that the idea that provision of infrastructure represented a way of providing infrastructure at no cost to the public has now been generally abandoned; however, interest in alternatives to the standard model of public procurement persisted. In particular, it has been argued that models involving an enhanced role for the private

sector, with a single private sector organization taking responsibility for most aspects of service provisions for a given project, could yield an improved allocation of risk, while maintaining public accountability for essential aspects of service provision.

Initially, most public-private partnership was negotiated individually, as one-off deals. In 1992, however, the conservative government of John Mayor in the United Kingdom introduced private finance initiative (PFI), the first systematic programme aimed at encouraging PPPs. The 1992 programmes focused on reducing the public sector borrowing requirement, although as already noted, the effect on public accounts was largely illusory. The labor government of Tony Blair, elected in 1997, persisted with the PFI but sought to shift the emphasis to the achievement of "value for money" mainly through an appropriate allocation of risk (Afolabi 2011).

In Nigeria, after independence, the state of infrastructure was poor and insufficient due to successive government's failure to develop, expand and maintain the available infrastructure (Oyegeke 2010). This failure to develop led to a decline in infrastructure which was already obsolete, dilapidated and poorly maintained. Likewise, inconsistent and poor government policies led to a further decline of basic infrastructure.

Water supply, sewage, sanitation, drainage, roads, electricity, waste disposal and most urban infrastructure all suffer from years of serious neglect and under funding, all these infrastructures were long hobbled by political instability, corruption and poor macroeconomic management. In the same vein, years of poor maintenance, under-development and under-investment have left Nigeria with a significant infrastructure deficit which in turn is holding back the nation's economic growth and development.

Periodic and routine maintenance which ought to be the most cost effective infrastructure spending is almost zero. The demand for basic infrastructure has risen rapidly over the years and has surpassed the supply capacity of existing assets (Alhassan 2010).

The oil boom of the 1970's led Nigeria to neglect its strong agricultural gap, Nigeria needs to make infrastructure investment beyond the means and assets available to government and this is where the private sector can play a very important and vital role of providing some of these new infrastructure investments through public-private partnership (PPPs).

"In line with the government's commitment to transparency and accountability and ensuring that the transfer of responsibility to the private sector follows best international practice and is achieved through open competition, the government inaugurated the Infrastructure Concession Regulatory Commission (ICRC) with a clear mandate to develop the guidelines, policies and procurement processes for PPP" (Afolabi 2011).

2.1.1 Definition of PPP

The term Public Private Partnership (PPP) has no meaning but it is used to describe many forms of arrangement between the public and private sectors for providing public services. PPP has been defined as arrangements between governments and private sector entities and related services. Such partnership are characterized by the sharing of investment, risk, responsibility and reward between the partners (British Colombia '99). PPP has also been defined by the Canadian Council for PPP as co-operative venture where there is an allocation of the risks inherent in the provision of public service between the public and private sectors. Partnership has been defined by the Encarta Dictionary to mean 'the relationship between two or more people or organizations that are involved in the same activity.

2.1.2 General Concept of PPP

Historically, most governments or their agencies have commonly funded public infrastructure projects either directly from budgetary allocations or by raising loans secured against government guarantees. The concept of PPP is underpinned by a

government's desire to resolve financial constraints by joining forces with the private sector to increase efficiency and effectiveness in the delivery of public services and facilities, while ensuring better risks management and increasing certainty of outcome (Ibrahim *et al.,* 2006). PPPs are also often aimed at accelerating economic growth, development and infrastructure delivery especially in developing countries (Akintoye, 2000 in Ibrahim *et al.,* 2006).

Four groups of actors have been provided being relevant in PPPs. These are; the government; nongovernmental organizations (NGOs), Community Based Organization (CBO) and the private sector. Also PPPs management systems and techniques are of different varieties and these are;

1. Contracting out which is the placing of a contract by a public agency to an external private company.
2. Franchising/concession: A private partnership takes over responsibility for operating a service and collecting charges and possibly for funding new investments in fixed assets.
3. Affermage: Public authority controls construction and owns the fixed assets but contacts out operations, maintenance and collecting service charges.
4. Leasing: Making use of equipment/assets without purchasing but paying a lease.
5. Management contract: Private organization takes over responsibility for managing a service to specified standard by using staff, equipment e.t.c, of public authority.
6. Build own and operate (BOO): Partnership between public and private sectors whereby the private firm may build, own and operate the asset/service.
7. Build operate and transfer (BOT): In this case the asset/service will be transferred to the public after a period of time.

8. Management Buyout (MBO): The management of well run internal functions negotiates the purchase of that function and becomes a private venture.
9. Co-operatives; self-governing voluntary organizations designed to serve the interest of their members, working in partnership with public authorities.

The most common form of PPP is contracting out. According to Sohail (2003), there are no strict PPPs classifications that can be made, because partnership classification depends on the type of services, the nature and strengths of the partners and the objectives of the PPPs. Partnership are basically institutional arrangement which constitute rules defining the relationships that govern the partnerships, responsibilities and accountability mechanisms (formal or implied). The overall aim of PPP is to meet public needs which would not have been realized without joint efforts. Through PPPs, inter-alia, the public sector will be able to maintain partial ownership and management of services, avoid accusations of "whole sale" transfer of service delivery to the private sector and at the same time be effective in its role of political accountability to its constituents (Afolabi 2011)

.

2.1.3 Types of Public Private Partnerships

(1) Design and Build (DB); DB is when one entity makes a contract with the owner to provide both the design and construction (only) of a facility. Finance is provided by the owner and payment for this service is made immediately.

(2) Build-Operate-Transfer (BOT): Here a concession is granted to a constructor to design, finance, maintain, and operate a facility for a period of time. The constructor recoups the cost of the project by collecting tolls during the life of the concession period.

(3) Build-Transfer-Operate (BTO): In BTO a private developer finances and builds a facility and, upon completion, transfers legal ownership to the sponsoring government agency. The agency then leases the facility back to the developer under a long-term lease reasonable return form user chares.

(4) Build-Own-Operate Transfer (BOOT): Here ownership of the facility rests with the constructor until the end of the concession period, at which point ownership and operating rights are transferred to the b host government.

(5) Build-Own-Operate (BOO): BOO resembles outright privatization. Projects of this type are often let with no provision for the return of ownership to government.

(6) Design-Build-Finance-Operate (DBFO): Here the contractor is responsible for the design, construction, maintenance, and financing. The constructor is compensated by specific service payments from government during the life of the project.

(7) Build-Lease-Transfer-maintain (BLTM); In this type of arrangement, a facility is typically destined, financed, and constructed by the private sector and is typically designed, financed, and constructed by the private sector and is then leased back to government for some predetermined period of time at a pre-agreed rental.

(8) Lease-Renovate-Operate Transfer (LROT): This model is for facilities that need to be modernized. The private sector constructor pays a rental to government and agrees to renovate the facility. In exchange, the constructor is granted a concession to operate the facility for a fixed period of time and to charge a fee for the service.

Adetola (2010) summarizes the different type of PPP in table 2.1

Table 2.1 Types of PPP

Schemes	**Modalities**
Service contracts	The private party procures and maintains an asset for a short period of time. The public sector bear the financial and management risk.
Operation and management contacts	The private sector operates and manages a public owned asset. Revenues for the private party are linked to performance targets. The public sector bears the financial and investment risk.
Leasing-Type Contracts Buy- Build-Operate BOO Lease- Develop-Operate LDO	The private sector buys or lease an exiting asset form the government, renovates, modernizes, and/or expands it and then operates the asset, no obligation to transfer ownership back to the government.
Build-Operate-Transfer (BOT) Build-Own-Operate-Transfer (BOOT) Build-Rent-Own- Transfer (BROT) Build-Lease-Operate-Transfer (BLOT) Build-Transfer-Operate (BTO)	The private sector designs and builds an asset, operates it, and then transfers it to the government when the operating contract ends, or at some other pre-specified time. The private partner may subsequently rent or lease same facility form the government.
Design-Build-Finance-Operate (DBFO) Build-Own-Operate (BOO) Build-Developed- Operate (BOO) Design-construct-manage-finance (DCMF)	The private sector designs, builds, owns develops, operates and manages an asset with no obligation to transfer ownership

Source: Adetola (2010)

2.1.4 Structure of the PPP (The BOT Model)

While PPP structures can take several forms, the BOT model is one model of infrastructure finance that is used when the government seeks to eventually acquire, by transfer, an asset that has been developed, constructed, and operated for a fixed term by the private sector. In its simplest form, a BOT project involves a grant by the host

government to private sector parties of a right (which, depending on applicable law in the country, may be based on contract or involve the issuance of a license or a concession) to own and operate a project, for a determined length of time-often up to 30 years and sometimes more. The private sector parties develop and build the project, and then operate and manage the project for the duration of the agreed term subsequent to completion of construction with the goal of recouping construction, operation and financing costs and making a profit from the proceeds coming from the operation of the project. Under the BOT model, at the end of the contract term, the project is transferred to the host government (Afolabi 2011).

There are two features of the BOT model that should be considered before purchasing a BOT opportunity. First, the host government, upon transfer of the project to the government, should have the managerial expertise and technological capacity to effectively control and operate the project. Second, the contracts should create incentives for the private sponsor to ensure that the project, at the time of transfer will be capable of being operated economically and efficiently for its expected remaining useful life.

2.1.5 Participants in the PPP

According to United Nation Economic Commission for Europe (UNECE) in Negotiation platform for PPP (2000), the list of Participants in the PPP scheme are;

*2.1.5.1 Project Sponsor:-*The project sponsor(s) typically are private companies and may include the main contractors for the construction of the project facilities and the operators. Private investors (e.g institutional investors/funds) may also be sponsors (and the host government and/or public entity may similarly be an equity investors in the project). The sponsors oversee and lend impetus to the development of a project and, if

there is no transfer, also receive the residual value of the project often the debt obligations of the project are fully paid.

2.1.5.2 Project Entity:-Depending on the provision of applicable law, the project is undertaken either by a corporation (a so-called special purpose corporation), or a partnership specifically established for the project. Such entity will enter into the relevant project and financing agreements and will own and operate the project assets.

2.1.5.3 Commercial Lenders:- The commercial lenders are customarily private banks, insurance companies, credit corporations and other financial institutions, based either abroad or in the host country. Often, the majority of the debt financing raised for a project comes from the international financial markets.

2.1.5.4 Multi-Lateral and Bi-lateral Agencies:-The world Bank, International finance corporation, regional development banks and other international entities, as well as bilateral expert credit agencies, provide significant credit support for infrastructure projects, particularly in the developing countries. These entities (other than the World Bank) may also provide debt or equity financing for the project.

2.1.5.5 Contractor:-The contractor is responsible for construction of the project facilities and generally is responsible for the containment of construction period costs. Sometimes, the contractor may be a group of companies (consortium) undertaking the construction on a joint and several basis. The contractor typically is expected to enter into a fixed price, tunkey construction obligation, meaning that the contractor must deliver a fully completed project, demonstrated to the operational, at a pre-determined lump-sum price.

2.1.5.6 Operator:-The operator is responsible for the operation and maintenance of the project. The operator customarily receives a service fee, which is subject to upward or downward adjustments based on performance of the project. If the operator is a shareholder of the project company at the time of contract negotiation and

implementation of the operation and maintenance agreement between the project company and the operator.

2.1.5.6 ***Supplier*:-** The supplier is responsible for the delivery to the project of necessary fuel (for a power project) or utility services (such as water and electricity). For power projects using fossil fuels, project sponsors and lenders are concerned with the underlying economics of the supply arrangements (in relation to expected revenues) and the ability of suppliers to perform their contracts (including payment of damages in the event of nonperformance)

2.1.5.7 Product Purchaser and Project User:- The product purchaser or project user purchases all or some of the product. Project sponsored and lenders are concerned with the payment and performance risk presented by product purchaser or project user, as the payment from the product purchaser or project constitute a major element in determining the finance ability of the project.

2.1.5.8 Host Government:- The host government is involved in the issuance of permits, authorizations and if applicable, the project license or concession, and may additionally be involved in the project in other ways, including as equity contributor, payment guarantor, supplier of raw materials and other resources, product purchaser, or provider of financial or credit support. The host government sometimes grants tax concessions to the project company and may provide foreign exchange availability assurances. The host government also may play a crucial role as public regulator of the project and, in such capacity, may affect the tariffs, tolls, fees or other vital aspects of the project.

2.1.5.9 Insurance Provider:-The project sponsor will procure all insurance coverage required by applicable law. In addition, the terms of the service agreements of lenders often result in the need to obtain a broader portfolio of insurance policies and coverage's.

Finally, project sponsors may seek additional insurance coverages, such as political risk insurance, to protect their investment (UNECE 2000)

2.1.6 PPP Agreement

UNECE (2000) identified the main agreements involved in a PPP infrastructure project according to negotiation platform for PPP infrastructure projects as the following;

2.1.6.1 Project or Concession agreement:-The project agreement is the central agreement of the project, setting forth the critical revenue provisions and performance obligations. The name of this central agreement may differ from project to project, depending on the type of infrastructure involved or on local legal issues. For example in power projects, the project agreement is the power purchase agreement, comprising the understanding between the project company and typically, a public utility.

2.1.6.2 Construction Contract:-The construction contract is the agreement between the project company and the contractor, setting for the terms and conditions of the construction of the project.

2.1.6.3 Operations and maintenance agreement:-The operations and maintenance agreement is the agreement between the project company and the operation of the project.

2.1.6.4 Shareholders Agreement:-The shareholders agreement is the agreement among the shareholders of the project company. The host government may or may not be involved directly in the negotiation of the shareholders agreement, depending on whether the host government is an equity participation in the project company.

2.1.6.5 Government Support Agreement:- Often, the host government will be required to provide financial or other support to a project. The terms and conditions will be set forth in some type of government support agreement, such as a payment guaranty or an implementation agreement.

*2.1.6.6 Financing Agreements:-*The terms and conditions of the debt financing of a project will be set forth in the financing agreements. If funds are borrowed from a syndicate of banks, the main financing agreement will be the credit markets, the main financing agreements will be the trust indenture or purchase agreement.

2.1.6.7 Other Agreement:- Other ancillary agreements are also customarily entered into, such as fuel supply agreement, a land lease agreement (or land purchase agreement), sponsor support agreements, security agreements, an escrow agreement and warranties and warranty bonds. The particular facts and circumstances of each transaction may additionally require further ancillary agreements between the relevant parties (UNECE 2000).

2.1.7 Principles of Risk Allocation

An important part of any project is the structuring of project risk. The identification, analysis, mitigation and allocation of risk are crucial to the planning and success of every project. By structuring project risk appropriately, the project participants can maximize the likelihood that the project risk appropriately, the project participants can maximize the livelihood that the project will be successful. The fundamental principle of risk allocation is that risk should be allocated by contract or otherwise, to the party best able to mitigate or control such risk. Economic benefits should be adjusted in relation to the risk assumed. If the private investor is subject to relatively few risks, the return on its investment should be lower than if it is asked to assume such responsibility and are also sufficiently creditworthy. Certain risks may not be also to be assumed by a party if they cannot be controlled or mitigated and present the risk of loss the private party's investment, or the party's credit is insufficient to support the assumption of risks (Ibrahim *et al.*,2010).

Applying the above principles, for examples, contractors to the project should be expected to accept risks which are linked to the construction of the project facilities and the operator should be expected to accept risks which are linked to the operation of the project. With very few exceptions, project risks are not assumed by the lenders. Project sponsors are expected to bear performance risks (which risks are, in part, transferred to contractors, suppliers or operators). As project financing generally investors committed equity. Typically, host governments are willing to accept political risks in the host country, which include, for example, legislatives, currency inconvertibility and sometimes general strikes and other non-project=specific labour related interference, political unrest, war and similar events involving the host country. Host governments do not normally accepts the commercial or financial risks of a project unless this is needed, to a defined extent, to make the project viable from the perspective of the lenders and project sponsors or to address other public policy objectives of the host government, such as providing better road access or power availability to a particular region of the country or maintaining tariffs at subsidized levels below the cost of production to the extend any risks can be covered by insurance at a reasonable cost, insurance is a natural and readily used means of covering risks with the costs of insurance included in the project's pricing.

It is important to understand that each project participant has its own perspective on risk allocation and that the willingness of a party to assume risk depends on its result, negotiations often focus on risk allocation issues and willingness of parties to seek comprise through a sharing of risks and reward (Afolabi 2011).

A common tool is structuring project risk is the creation of a risk matrix, a tabular format setting forth the various project participants, an analysis of the relevant project risks, any mitigation measures deemed appropriate and the allocation of risks to specific participants. As part of this matrix, it is important also to identify the consequences

deriving from the occurrence of a risk for the parties who have agreed such risk. The consequences can take the form of either loan which ranks junior to the loans of lenders. In some instances the relevant consequences may be termination or extension of the project agreement (Ibrahi*m et al.*,2007).

2.1.8 Interest of the Parties

2.1.8.1Fundamental Interest of the Host Government with Respect to the PPP Structure

In implementing PPPs, host government typically wish to protect certain fundamental public interest as identified by Kwak *et al.* (2009):

1. Continuity at all times of the project services or product;-The host government will seek contractually binding assurances of performance by the project sponsors, with payments for damages for substandard performance (and in some cases, bonuses for superior performance). Parties often focus on obtaining a fair balance of penalties and incentives to assure performance at expected levels.
2. Satisfaction at all times of environmental protection, health, safety, security and quality standards applicable in the host country.
3. Appropriate prices charged for the project services or product.
4. Non-discriminatory and fair treatment of customer and users.
5. Appropriate level of disclosure of information on operations and activities of the project company
6. Flexibility to meet changed conditions in the future.
7. The project should fit the current or anticipated future market structure.
8. The benefits of competitive bidding should be evaluated and appropriate procurement systems adopted.

2.1.8.2 Fundamental Interests of the private sponsors with respect to the PPP structure

For private investors in PPPs, certain interests are fundamental:

1. Sufficient legislation and regulation should exist to assure protection of private investment. Such protection should also cover the rights of the private parties to project and its operation.
2. All required concessions, licenses, permits, and authorizations must be able to be obtained in a timely and non-discriminatory manner.
3. The host government and authorities should have authority to grant the required concessions, permits, consents and licenses and to enter into the necessary project agreements with the relevant private parties.
4. The law must be clear as to the right of private parties to own and operate the project and the project assets.
5. The law must provide for the creation and enforcement of security rights in the project assets including government approvals and licenses and revenues contracts. The law must also allow the project lenders and for their designee to take over and operate the project in case of default by the project company.
6. If the source of project revenue is in hard currency, the project sponsor will want payments to be made in such hard currency to bank accounts outside the host government and between private investors tribunals and/or independent and impartial courts applying principles of due process and whose rulings are legally enforceable.

2.1.8.3 Interest of the Lenders

Lenders often are not present or even identified at the time the host government and the private sponsors initially negotiate and execute the project agreements. The role of

lenders, however, in a project financing is crucial, and the interests should therefore be incorporated into the structuring of the project and the negotiation of the project agreements to facilitate the financing process and to avoid the need to amend the project agreements at the time of financing. The host government and the private sponsors have a mutual interest in reducing the transaction costs and time involved in producing project documentation acceptable to the lenders as identified by Ibrahim *et al.* (2007).

The lenders will generally have several concerns among others, with respect to the project agreement:

1. The lenders will need to be persuaded that the income from the project, as supplemented by any credit enhancement or support, will be sufficient to repay all of the debt obligations of the project company and hence will generally be concerned with;
2. The strength of the underlying economics of the project
3. The availability of the terms and conditions of the main project agreement with the host government and the other project agreement and
4. The credit worthiness of the companies or state agencies which may be parties to the project agreements (such as the power purchaser) or, where such companies or agencies are of insufficient credit worthiness of any sources of credit support provided with respect to their obligations (e.g Central Bank payment guaranties).
5. The lenders will need to be provided with a security interest in the project assets, including without limitation. The shares of the project company, the project revenue contracts and the rights of project company in connection with the project agreements and the tangible and intangible personal property of the project company.
6. The lenders will want to be provided with as much credit enhancement as is justified by the circumstances, including without limitation, sponsor guaranties, a government

guaranty or support facility, a debt reserve escrow account, a substantial equity cushion and/or multilateral institutional support although lenders generally will want as much credit enhancement as possible the actual need for the host government or sponsors to produce credit enhancement country and project specific.

7. The lenders will likely require a share retention obligation on the part of the private sponsors to ensure continued interest in developing and operating the project.
8. The lenders will expect repayment of all debt obligations, including principal and interest, in case of termination of the project revenue contracts, regardless of the cause of termination.
9. The lenders will want to have "step-in" rights, which grant the right to assume or have assumed by a qualified third party the right and obligations of the project company in case of default under the project agreement.

2.1.9 Benefits and Obstacles of PPP

According to Adetola (2010), a worldwide experience has shown that PPP, if properly formulated, can provide a variety of benefits to the government. Some important benefits are:-

1. A PPP can increase "value for money" spent for infrastructure services by providing more-efficient, lower cost and reliable services.
2. A PPP allow the public sector to avoid up-front capital cost and reducing public sector administration costs.
3. The project life-cycle costs and project delivery time can be reduced by using a PPP.
4. A PPP can improve the quality and efficiency of infrastructure services.
5. A PPP facilitate innovation infrastructure development.
6. The public sector can transfer risks related to construction, finance and operation of projects to the private sector; and

7. A PPP can promote local economic growth and employment opportunities.

Despite their broad benefits and increasing usage in infrastructure development, PPP's have been criticized in several aspects, which include:-

1. PPP's are relatively new concepts that are not well understood in some countries.
2. Both public and private sectors still lack appropriate knowledge and skills to implement such long-term projects.
3. Competition in P3 projects is limited due to the high tendering costs.
4. PPP projects are highly likely to be delayed by political debates, public opposition, and complex negotiation process.
5. PPP projects may cost more since the private sector cannot borrow capital to finance projects as cheaply as public sector.
6. Project accountability may be reduced in PPPs because a great deal of information can now be treated as "commercial in-confidence" and
7. PPPs can result in a monopoly situation and higher costs to public users for using the infrastructure services.

2.1.10 The Objectives of PPPs

UNECE (2000) identified that in bringing the best of the public and private sectors together, the key test of any partnership arrangement is not whether it is classified to the public sector or to the private sector. Instead, what matters is whether it provides the structure mostly to deliver the government's objectives. The government develops public partnerships with three broad objectives in mind.

1. To deliver significantly improved public services by contributing to increase in the quality and quantity of investment.
2. To release the full potential of public sector assets including state-owned businesses and hence provide value for the tax payer and wider benefits for the economy.

3. To allow stakeholders to receive a fair share of the benefits of the PPP. This includes customers and users of the service being provided, the taxpayer and employees at every level of the organization (Dahiru and Abdulaziz 2010).

2.1.11 Characteristics of PPP

According to UNECE (2000) PPP includes a wide range of contractual arrangement between the public and private sectors. In general, there are three features:-

1. PPP combines the design, construction (or rehabilitation) of public infrastructure with its maintenance and sometimes with the delivery of service directly to the user. The transfer of responsibility for design, construction and maintenance to the private contractor provides an incentive to minimize the whole life costs of the infrastructure service.
2. The contract requirements are defined as outputs and standard to be met, rather than inputs (such as exactly how the infrastructure should be designed and build. So, for example, its traffic capacity, safety standard, other environment standard, and so on. It does not need to specify exactly how the road is to be constructed. Contractors will be able to propose their own design and construction methods, although the road procuring authority will need to satisfied that the proposal are consistent will also need to take into account the need to provide maintenance to ensure that the infrastructure continues to perform as required over the entire period of the contract.
3. Payment to the contract (or revenues from user charges in the case of concession) is linked to meeting the specific standard of performance. If the quality of service falls below the required level, payment will be reduced accordingly. This gives the public authority the ability to enforce the contract effectively and private contractor a strong incentive to perform. It also means that payments do not commence until

the service is provided, and that design and construction is financed by the contractor. The cost of this financing is recovered from service charges (and/or user charges) over the remainder of the contract period. This method of payment provides a strong incentive to the contractor to complete the construction phase and provide the service as quickly as possible so that payments can commence. It also means that the contractor needs to continue to provide the service throughout the contract term in order to recover all of the financing costs. In effect, the public authority leases the asset(or grants the right to exploit it in the case of concession) , and transfers the responsibilities and risks of ownership to the private contractor.

2.1.12 Key Principles of PPP

According to UNECE (2000), there are key principles that the government will have to determine before embarking on a PPP scheme as a procurement option for public infrastructure which includes:

2.1.12.1Public Interest

The public authority should have adequate consultation with end users and other stakeholders prior to the initiation of an infrastructure project. Likewise private sector contractors providing vital services to communities need to be mindful of the consequences of their actions to these communities and work together with the public authorities to avoid or mitigate socially unacceptable options.

2.1.12.2Value for Money

Achieving the best value for money in providing public services is a key consideration at all stages of a project's procurement and development. There should be a slope for a private proponent to deliver value for money and both government users.

2.1.12.3 Risk Allocation

The government under PPP arrangement always seeks to optimize rather than maximize the transfer of project risks to the private contractor. What this means is that risks will be allocated to the party best able to manage them.

2.1.12.4Transparency

There should always be a sound enabling environment for infrastructure investment (which implies high standards of public and corporate governance, transparency and contractual rights) to encourage the participation of the private sector. Also the awarding of infrastructure contracts or concession will be designed to guarantee procedural fairness, non-discrimination and transparency.

2.1.12.5Output Requirement

The formal agreement between the public authority and private contractor will be specified in terms of verifiable service standards on the basis of output performance based specification. It should also contain provisions regarding responsibilities and allocation of risk in case of unforeseen events.

2.1.12.6Competition

By ensuring that business activities are subject to appropriate commercial measures, and through effective competition the benefits of private participation in infrastructure are increased.

2.1.12.7Capacity to deliver

The public authority must have the capacity to manage the processes involved and to partner on an equal basis with the private sector.

2.1.13 The Underlying Need for PPP

Adetola (2003) identified the following as the underlying needs for PPP

1. PPPs fill a critical resource and expertise gap in infrastructure delivery and operation.

2. PPPs lead to accelerated provision of infrastructure
3. PPPs also promote faster implementation of projects, and reduced life cycle costs due to private sector efficiencies.
4. PPPs often lead to the generation of additional revenue and overall value for money for the entire economy.
5. PPPs endanger accountability in resource utilization and also improve the overall quality of service.
6. PPPs provide for better risk allocation between public and private sectors, then offering a better and sustainable incentive to perform.
7. PPPs allows government to retain ownership while contracting the private sector to perform a specific function such as building, maintaining and operating infrastructure like roads and ports, or providing basic services like water and electricity with both sides benefiting from the contractual agreement. Shares risk and responsibility with the private sector but will ultimately retaincontrol of assets and accountability.

2.1.14 Critical Success Factors

According to Ibrahim *et al* (2006) project success means different things to different people depending on their perspective. However, the methodology used for determining success factors in practice has been to follow a procedure that attempts to make explicit the key areas that are essential for management success.

In the context of information systems and management, Rockart (1982) in Ibrahim *et al* (2006) defined critical success factors (CSFS) as "those few areas of activity in which favorable results are absolutely necessary for a manager to reach his/her goals". He also stated that CSFS are those fundamental issues inherent in the project - which must be maintained inorder for teamwork to take place in an efficient and effective manner, and

require day-to-day attention throughout the life of the project. Therefore, the definition of project success will amongst other things depend on project type, size and sophistication, project participants, and experience of owners, etc. Researchers have proposedvariouslost of critical success factors for PPP projects through literature review, case studies and interviews with industrial practitioners and experts. Li *et al (*2005) in Ibrahim *et al (*2006) identified and categorized nineteen (19) CSFS necessary for successful PPP project under five groups:

2.1.14.1Effective procurement

1. Transparent procurement process
2. competitive procurement
3. good governance
4. well – organized and committed public agency
5. social support
6. shared authority between the public and private sector
7. thorough and realistic cost/ benefits assessment
8. technology transfer

2.1.14.2 Project Implementability

9. project technical feasibility
10. favorable legal framework
11. appropriate risk allocation and risk sharing
12. commitment and responsibility of public and private sector
13. strong private consortium

2.1.14.3 Government Guarantee

14. government involvement by providing guarantees

15. multi-benefit objectives

16. political support

2.1.14.4 Favorable economic condition

17. Stable micro – economic conditions

18. sound economic policy

2.1.14.5 Available Financial Market

19. available financial market

2.1.15 PPP Finance

A sound financial plan is critical to the success of a PPP project (Kwak *et al.*, 2009). Most infrastructure projects are marketable to market oriented facilities because they have revenue stream which encourages private sector participation. Project financing is one of the fundamental factors in project success (Chua, 1999: Oyegoke 2009). Therefore, before embarking on developing infrastructure, assets, there is need to assess the project broad financial feasibility studies, cash flow, and the revenue stream in the operational stage.

2.1.15.1 Financing Technique, Instruments and Strategies

To finance PPP projects which are often characterized as being large, complex, and capital – intensive - requires innovative financial engineering techniques? Project financing is one such technique. In project financing, a project is considered as a distinct legal entity and the financing of a project is repaid from the cash flows generated by the project. PPP projects are generally funded with both equity (e.g .Common stock) and debt (e.g. loans). One philosophy that is commonly followed is to utilize as much debt as the project cash flows permit to generate an attractive return for shareholders. In this regard, the capital structures in most PPP projects are highly leveraged, with equity financing covering 10-30% of total project costs and debt financing covering the

remaining 70-90%. Although the higher debt may allow for higher rate of return to equity investors, too much can provide more risks to the project. Therefore, an appropriate mix of equity and debt is necessary when financing a PPP project.

In addition, project risks, project conditions and financing sources need to be taken in to account when selecting an appropriate financing strategy for a project.

2.1.15.2 Government Support

The financial viability of a PPP project is affected by a number of factors, including market need, tariff structure, concession period, credibility of the project, and force majeure events. Several types of government support are sometimes required to improve the attractiveness of a PPP project. Some examples are;

1. Minimum Guaranteed Revenue: To secure minimum guaranteed revenue from the government is way for the private sector to mitigate market demand risk. Such government support can be in a form of the guaranteed minimum purchase of the services
2. Flexibility in Tariff Structure: The tariff structure and its adjustment have significant impacts on the project cash flows. Hence, some flexibility in tariff structure may be required to enhance the financial viability of a PPP project. In some cases, tariff adjustment mechanism will be determined in advance, under some circumstances.
3. Financial Support: different type of financial supports, both directly and indirectly can be used to increase to finance return of the project. Direct financial support may include the investment of capital (e.g. grants or loans), free use of project sites and facilities, and tax incentives. Indirect financial supports often involve providing assistance to the private sector in financing process. One way is to provide a loan guarantee for the project concessionaire, which assures lenders that the debt will be fully or partially repaid by the government if the project fails.

4. Force Majeure Protection: Force majeure events may have significant negative impacts on the project performance, such as causing delay in completion or termination of the project. To extend concession periods or to make compensation for some force majeure events are two possible government supports that can protect the concessionaire from the loss caused by such events.

Other government supports include foreign exchange, rate protection and early completion bonuses. An appropriate level of government support can improve the financial viability and enhance the attractiveness of a PPP project. However, too much government support may raise a concern that the private sector will make too much profit at the cost of the public. To avoid such concern, the government should adjust the level of its support and choose appropriate types of supports according to the viability of a PPP project (Afolabi 2011).

2.2 Concessioning

2.2.1 Infrastructure

It has been said that there is no clear cut definition for infrastructure but recognition has been placed on what it is and what it is not, thus infrastructure has been said to be structural elements of an economy that facilitate the flow of goods and services between buyers and sellers (Macmillan Dictionary, 1996). Infrastructure has also been said to be public services or systems i.e. the large-scale public system, public services and facilities of a country or region that are necessary for economic activity, including power and water supplies, public transportation, telecommunications, roads and schools (Afolabi 2011).

Infrastructure has been further defined by the infrastructure concession regulatory commission to include among others power plants, highways, seaports, airports, dam , irrigation, telecommunications, railways, interstate transport systems, industrial estates

housing, information technology networks and database infrastructure satellite and ground receiving stations, land reclamation projects. Also, according to Oxford English Dictionary, infrastructure is the basic physical and organizational structures needed for the operation of a society or enterprise and in Sullivan and Scheffring economics. Principles in action, infrastructure was defined to be services and facilities necessary for an economy to function.

Infrastructure has further been defined by the American Heritage Dictionary to typically refer to the technical structures that supports a society, such as roads, water supply, sewers, power grids, telecommunications and so forth. Also, according to Miller (2002) in Oyegoke (2010), infrastructure collectively covers many areas that can be broken down into:

i. Capital (building) facilities – housing, factories and other structures which provide shelter;
ii. Public services and utilities – power plants, water resources, waste removal, minimization and control;
iii. Transportation – people, goods and information; and
iv. Environmental restoration: this signifies that infrastructure projects are such that have a high magnitude cutting across different engineering disciplines.

From the foregoing, it is clear that for every society or nation to function effectively, there is the need for basic infrastructure because it is of paramount importance to economic growth and development.

In Nigeria, after independence, the state of infrastructure was poor and insufficient due to successive government failure to develop led to a decline in infrastructure which was already obsolete, dilapidated and poorly maintained. Likewise, inconsistent and poorly conceived government policies led to further decline of basic infrastructure.

Water supply, sewerage, sanitation, drainage, roads, electricity, waste disposal and most urban infrastructure all suffer from years of serious neglect and under funding, these entire infrastructure were long hobbled by political instability, corruption and poor macroeconomic management. In the same vein, years of poor maintenance, under – development and under – investment have left Nigeria with a significant infrastructure deficit which in turn is holding back the Nigeria's economic growth and development.

Periodic and routine maintenance which ought to be the most cost effective infrastructure spending is almost zero. The demand for basic infrastructure has risen rapidly over the years and has surpassed the supply capacity of existing assets.

The oil boom of the 1970's led Nigeria to neglect its strong agricultural and light manufacturing bases in favor of an unhealthy dependence on crude oil. A collapse ofbasic infrastructure and social services since the early 1980's followed this trend.

In order to bridge this yawning infrastructural gap, Nigeria needs to make infrastructure investment s beyond the means and assets available to government and this is where the private sector can play a very important and vital role of providing some of these new infrastructure investments through public-private partnership (Afolabi 2011).

2.2.2Concessions

Concession has been defined by Merriam Dictionary as the act or instance of conceding as by granting something as a right, accepting something as true or acknowledging defeat. It has further been described to be a business operated under a contract or license associated with a degree of exclusivity in business within certain geographical area for example, public service such as water supply may be operated as concessions.

In the case of public concession, a private company enters into an agreement with the government to have the exclusive right to operate, maintain and investment in a public utility (such as a water supply system) for a given number of years.

Ownership of public assets is a sensitive issue for all governments. However, budgetary shortfalls as well as the repeated failure of governments all over the world to maintain these assets have forced them to change their attitude towards private ownership of such assets.

Thus, concession contracts, through which ownership rights continue to reside with public authorities save operation rights and associated returns being transferred to private players have been gaining popularity around the world. Under concession contract, private partner gets exclusive rights from the government to operate, maintain and sometimes even carry out investment in a public utility for a given period of time. In return, the private party pays either a fixed sum, percentage of revenue from the utility or a combination of the two to the government for exclusive rights over a facility. Revenue to the private party comes from users of the facility. The major advantage of a concession is that it allows certain public assets, for which private ownership is economically inefficient and politically not possible, to be maintained and operated efficiently by private players. Bidding for concession contracts introduces competition into the industry, albeit in an artificial sense. Such competition often induces private players to minimize cost, as one of the criteria used for awarding a concession is price cap regulation, in which they need to state the minimum price they would charge for services provided. Finally, in concession, competition between firms occurs between investment commitments that generally create enough space for optimal pricing (Afolabi 2011).

Concession contracts are typically defined by the following four features:

1. The contract governs the relationship between the concession granting authority and the private concessionaire. The concession – granting authority is the government, an inter-ministerial commission, or less common and the least appropriate – the regulatory agency.

2. The concessionaire is responsible for all investments and for developing all new facilities, many of which are specified in the contract – under the supervision of state or regulator. The concessionaire retains control and use rights over the new assets until they are handed over at expiration of contract. The contract might contain a clause specifying compensation for investments not fully amortized by the end of the concession period. And clauses specifying causes and remedies for early termination of contract and stating penalties and fines for non-compliance with agreed upon terms.
3. The concession is awarded for a limited but potentially renewable period, during which concessionaire enjoys the exclusive right to use the assets, exploit existing facilities and develop new ones. The contract determines conditions under which concessionaire uses these facilities and the prices at which it provides the service. The facility continues to be publicly owned.
4. The concessionaire is remunerated based on contractually established tariffs (with appropriate guidelines for review and adjustment) collected directly from users. These prices are typically regulated through rate – of – return or price – cap mechanisms, usually driven by the principle of "efficient financial equilibrium" allowing the firm to earn a fair of rate of return on its investments. If revenues do not cover costs, compensation mechanisms are established.

Given a wide range of settings in which they are used, concessions are often far more complicated than these basic features suggest. "Concession contracts also usually contain other obligations and rights that require regular regulatory oversight in monitoring compliance, reconciliation of interpretations, adjustment of tariffs in the events of contingency, periodic tariff reviews, and renegotiation of triggers and terms. The

government's role thus involves setting rules for competition at the bidding stage and enforcing terms of agreement and compliance with regulations".

Generally, the awarding process has to be competitive to ensure efficiency. The common trend is to follow a competitive bidding process. However, in some exceptional situations, the government has to go for direct award of the concession or through bilateral negotiations. Thus, there are two ways of awarding concession – direct award and competitive bidding (Ibra*him et al.*,2007).

Finally, concession period is determined by factors which are project specific such as capacity of the asset to generate revenue, user tariffs, total investment, depreciation and operation and maintenance cost of asset e.t.c. For example, in port related projects, determining factors for the length of concession would be the capacity of the port terminal to handle cargo and average demand for port services. In case demand, is uncertain in nature, a long concession period is preferred to mitigate the risk.

Concession period usually reflects the number of years required to recover the investment. For long duration concessions, fixing a particular time period for full amortization is usually not feasible as infrastructure services require continuous investments that cannot be predicted well in advance; investments almost always must be made towards the end of the contract and cannot be amortized before its expiration.

2.2.3 Transaction Costing

Transaction cost is a very important cost factor inherent in an infrastructure project owing to the duration of pre-investments, investments, and construction planning periods. However, these are different views about the scope of transaction costs based on the period and the nature of such costs. Miller (2002) in Oyegoke (2010) refers to a transaction period as a period (with related costs transaction costs) that begins on the date when the initial application to build the project is submitted, and runs through to the date

when construction starts. The cost incurred during the transaction period is referred to as transaction costs, i.e cost associated with transaction, but not with actual design, construction, or operation. Transaction costs cover the expenses in cured by the initiator associated with a proposal from the initiation stage to the point when the construction starts.

In concession contracts, transaction cost for developers and operators is usually huge due to the process of preparing bids and proposals for infrastructure concessions. According to Kerf *et al* (1998) in Oyegoke (2010) the transaction costs of preparing bids may easily amount to 5 to 10 % of the project total costs. Investors may thus be reluctant to prepare and submit proposals if the costs of doing so are high and their chances of winning are slim. This may be particularly true for entrants that are less established. They postulate further that some governments have adopted cost sharing mechanisms to defray bidder's cost in preparing and submitting bids. The U.K private finance initiative according to Kerf (1998) in Oyegoke (2010) may offer such arrangement in projects were high bidding costs might otherwise limit the number of potential bidders. The decision to do this is left to the authorities carrying out the bidding and award process. Reimbursement of all or part of the bidding costs may be considered particularly if a project is withdrawn after an invitation to negotiate has already been issued (Ibrahim *et al.,* 2007).

2.2.4 Tendering Process

The object of tendering is to select a suitable contractor, at the proper time, and to obtain an acceptable offer to execute, construction works (Brooks 2004 in Al-Hassan 2010). This refers to the overall methods used by the client to arrive at a tender figure.

The tendering processes of PPP are more complicated more costly than those of traditional infrastructure development approaches. For example, Kwak *et al (2009)*found that tender costs for PPP projects in the UK ranged from 0.48-0.62% of the total project

costs, which are much larger than those for design – build project (0.18 – 0.32%) and traditional design – bid – build projects (0.04 – 0.15%). A well structured tendering process that can minimize tendering costs and encourage competition is therefore necessary. Many governments adopts a multistage tendering process composed of stages such as inviting expression of interest, pre qualifying tenders, evaluating tenders, and negotiating with the preferred tender's to select the most suitable concessionaire. Governments will also develop step – by step guidelines and standardized tendering documents and contracts to facilitate tendering process (Oyegeke 2010).

1. Invite expression of interest: This is the stage where the government advertises the project to potential private investors such advertisement is often published in a public gazette and on government websites. For instance, notice of PPP projects must be published in the official journal of European Community (OJEC) in the UK and in the government gazette in Hong Kong.
2. Pre-qualify Tenders: The aim of this prequalification stage is to reduce the number of interested tender s to a short list, which consist only of reputable and experienced tenders. This process can ensure that weaker tenders do not incur unnecessary tendering costs.
3. Evaluate Tenders: Tenders on the shortlist are invited to submit detailed proposals that are then evaluated in accordance with the pre-determined evaluation criteria. The evaluation in this stage focuses on technical and financial feasibilities of the proposal.
4. Negotiate with preferred tenders: The government may select one or few preferred tenders to negotiate with. During the negotiation stage, provisions in agreements are carefully reviewed. Once the agreement is signed, a contract award notice will be published and the contract is implemented.

2.2.5 Concessionaire Selection Methods and Criteria

According to HM Treasury, a tender should only be selected as the preferred tender and subsequently awarded the contract when it satisfies criteria including: meeting output specifications, whole life value for money, acceptance of key contract terms and required transfer of risks, confirmation of access to finance, unitary charge affordable to the public client, and a cohesive consortium. A number of tender evaluation methods and criteria are developed to assist government in selecting such a right concessionaire (UNECE).

2.2.5.1 Evaluation Methods

Some tender evaluation method that are currently in use include; the simple scoring method, NPV method, multi – attribute analysis, Kepner Trego decision analysis technique, two – envelop method, NPV method plus scoring method, and binary method plus NPV method. The binary method, simple scoring method, and two – envelop method may be more appropriate for small and simple PPP Project, the NPV method may be more appropriate for projects with no technical problems; and the multi-attribute analysis and Kepner-Tregoe decision analysis technique may be more suitable for complex PPP projects. Different governments may use different methods or a combination of multiple methods to evaluate tenders. For instance, the Hong Kong government uses the Kepner-Trigoe decision analysis technique to select the concessionaire for its BOT projects; the UK government uses both the NPV method and the multi-attribute analysis to evaluate tenders for PFI projects. Although different methods have their advantages and disadvantages, among these methods, the NPV method and multi-attribute analysis are the two most recommended by experts and experienced practitioners.

2.2.5.2 Evaluation Criteria

A variety of tender evaluation criteria for PPP projects have been previously explored by researchers. These evaluation criteria are classified into four packages: financial, technical, safety, health and environment; and managerial. A proper set of evaluation criteria should be determined on the basis of the public client's objectives, the project characteristics, and the uniqueness of the particular PPP Scheme. In addition, weights that reflect the relative importance of each set of criteria should be assigned.

2.3 Concession Award Process

There is no definite execution strategy in concession project development. Kerf *et al.* (1998) highlighted some important issues to be considered when designing an appropriate method for awarding the concession. The issues include:

1. Whether to use competitive bidding (or some other method) to award the concession.
2. Whether to have a prequalification process for interested bidders.
3. How to structure and evaluate bids.
4. Whether to have sealed or voice bids
5. Whether to have single or multiple bidding rounds.

The design of the bidding and award procedures can have a significant impact on the economic efficiency and transparency of the concession.

A management firm comprising the members of the consortium is responsible for managing the finances, construction and the operation of the property. The process begins with the selection of a forecasting and financial feasibility modeling teams in making of business decisions. The team is responsible for analysing risk associated with the project from demand and supply, and micro and macroeconomics perspective in

terms of revenue, construction, operation, and business factors. The consortium may also be widened to comprise firms in construction, consulting, and financial institutions.

In another form, the government solicit bids from a group of consortium, based on financing arrangements, competitive delivery processes by the developer, and revenue stream forecasts by independent consultant (e.g. ridership forecasts for a road project) the pre-qualification process begins by asking the developers to summit a conceptual proposals. The aim is to obtain competitive proposals that provide sufficient information that allows fair evaluation. A franchise agreement that provides information on the facility, granted rights on the property, an executive right to provide services, franchise fees, variable franchise fees, excess franchise, basis for return on investments, reserve funds, reports control on user's charges, design and construction standards, environmental clearance, safety of operating parties, land acquisition, toll/levy enforcement and penalties and third party claim and other details as the project dictates.

The authority formed an evaluation team and provided technical experts augmented by consultants familiar with the project. Financial experts, airports development experts, financial advisors, were brought on board under three independent panels: business and finance, development and operation and management. The received proposals from the bidders were evaluated based on: financial return, cohesiveness of proposals. One of the factors that can assist in the success of the delivery method is a short approval time in major project decisions (Afolabi 2011).

Given and complexity of many infrastructure privatizations and new investment projects, it is often difficult for government to evaluate and compare proposals from different bidders. In designing the bid evaluation process, according to Kerf (1998) the government must decide;

1. Whether to have a two-stage process involving the sequential evaluation of technical and financial proposal.
2. Which specifications to include for technical and financial proposals.
3. How to assess whether a technical proposal is fully responsive to the specified requirements.
4. How offers should be evaluated and compared.

There are many different options for structuring proposals. Some of the more common options include bidding on:

1. The highest price, in cash or debt retirement, to be paid for the assets or shares of the enterprise being privatized or highest concession fee (one-time or annual) paid to the government.
2. The lowest cost to the government for constructing or operating facilities or services.
3. The largest amount of new investment to be undertaken by the operator.
4. The lowest tariff to be charged to consumers.
5. The lowest net present value of the future revenue stream to the developer from the service or project.
6. The lowest subsidy that the government must provide to the winning bidder to operate a loss-making service.

(Source: MacDonald 2002 in Oyegoke 2010).

In addition, there are other criteria on which projects may be bid such as the maximum extent of new service coverage promised or the minimum length of the concession period. Another biding option, which is commonly used for either new infrastructure projects or concessioning of an existing service (where assets are not being sold), involves bidding on the basis of the tariff to be charged to consumers.

2.4 Application of PPP in Nigeria

According to Afolabi (2011) Governments are allocating a lot of money to building and/or maintaining public infrastructure, and the provision of public services. In Nigeria for example, the construction and management of mega facilities, structures, and Nigerian government has recognized its short comings in meeting the public demand through the provision of public services solely from the government's purse. Hence, the government's desire to resolve financial constraints by joining forces with the private sector (Ibrahim et *al.*, 2006) in the efficient while ensuring better risk management and increasing certainty of out-comes.

Among the various models of PPP, the most commonly used in Nigeria are the Joint Venture (JV), and Build Operate – Transfer (BOT) approaches (Ibrahim *et al.*, 2007). The government has applied them in the delivery of variety of infrastructural projects ranging from roads, tourism and hostel development in universities to power generation (Ibrahim, 2006). JVS have been defined by Li *et al.* (2005) as "partnership in which public and private parties pool their assets, finance and expertise under joint management, so as to deliver long term growth in value for both partners". It has also being defined by the National Audit Office (NAO), 1999 , as a partnership where cost of a project are not met entirely through charges on the end user of the services but are subsidized from public funds: the public sector 's role is limited to a contribution towards asset development, while operational control rests with the private sector. On the other hand, Ibrahim *et al.* (2007) sited Tiong (1995) to have defined the BOT project delivery method as "the granting of a concession by the government to a private promoter, known as concessionaire, who is responsible for the finance, construction, operation, and maintenance of a facility over the concession period before finally transferring the fully operational facility to the government at no cost."

AIPDC, the quasi – public arm of the Federal Capital Development Authority (FCDA) is one of the leading promoters of PPPs in Nigeria. It is responsible for facilitating, encouraging and attracting investments by ensuring that the right incentives and initiatives are put in place to stimulate and promote the economic development of the Federal Capital Territory. In their research, Ibrahim *et at.*(2006) found that the company is currently undertaking PPP projects using the BOT and JV mechanisms in delivering infrastructure which include the development of multi-level car parks, 65Km metro/rail lines, automotives services village neighborhood centers, and the operation and management of two conference centers, hotels and banks.

In addition, Dahiru and Abdulaziz (2010) in their research found the following as major practices of PPP in Nigeria which includes;

1. Facilities Management of public building in the FCT through public private partnership

In 2004, when government became worried by the rapid rate of deterioration and lack of proper maintenance of building in the FCT to arrange for public partnership arrangement to take over facilities management of Public Buildings in the FCT. A Private Public Partnership arrangement it was reasoned will be more efficient and cost effective in the management of public facilities.

In order to synergize with the private sector, the Federal Capital Territory Administration (FCTA) mandated it's wholly owned, property development company, Abuja Investment and Property development company (AIPDC) to provide facilities management operations to public buildings in the DCT through PPP arrangement. AIPDC thereafter categorized the public buildings into revenue generating and non-revenue generating facilities and designed various form of PPP arrangements to suite their specific nature.

Two examples of such initiatives are Abuja international conference centre and Eagle Square.

The Abuja international conference centre and Eagle square were classified as revenue generating facilities and designed to be managed by a single operator and manager. The preferred method of delivery chosen by the FCTA is management contract. Under this initiative, the operation and management agreement was signed with Integrated Facilities Management Service Limited (a local facilities management company) in September, 2005. The facilities managers working with a consortium of events managers, hospitality industry consultants and financial managers will be totally responsible for the funding, rehabilitation, operation and maintenance of the facilities and will be expected to run the facilities as a going concern. A profit sharing ratio between the operators and managers and government was worked out and included in the agreement (Dahiru and Abdulaziz 2010).

2. Development of Housing Units Between Federal Housing Authority (FHA) and CITEC at Gwarimpa II Housing Estate, Abuja

The completed large number of uncompleted housing units initially constructed under National Housing Authority (FHA) during the regime of Gen. SanniAbacha but later abandoned were completed and sold to the general public through Public Private Partnerships. Under these arrangements, developers such as Messer CITEC and ADKAN Services limited syndicated loans from commercial banks other financial institutions to finance completion of the project and the completed housing units sold through mortgage financing to the public.

3. Development of Murtala Mohammed Terminal 2 Project in Lagos, Nigeria.

The financing and development of the MM2 Terminal project was undertaken by a local consortium Bicourtney under a Public Private Partnership arrangement with the Federal Government. The arrangement also covers management of the facilities of the Terminal.

4. Infrastructural Development of States in Nigeria through PPPs

Oceanic bank international Plc recently pledged to contribute to the socio-economic and infrastructural development of Kebbi State through sustained Public Private Partnership (PPPs) that will cut across various sectors of the State. The bank has also entered into partnership with some State Government such as Delta State; Osun State and Federal Capital Territory for the development of industrial parks. Memoranda of understanding (MOU) have been executed with the involved States.

While taking its involvement in PPP to a higher note, the bank recently unveiled plans to raise a N50 billion development bond for Anambra State; the bond was likened to a Marshal plan for the State and would provide funds directly to the Anambra State Government of her development partners under a Public Private Partnership (PPP). The Oceanic Bank package includes interventions in education, health, the environment and ecology, commerce and industry, housing and urban development, roads and bridges, power and energy, transport, poverty alleviation, wealth creation and economic development. Funding the rehabilitation and re-equipping of the government's hospitals and financing its counterpart funding for drug revolving schemes also come under the proposal.

5. Development of Tinapa Business Resorts Calabar, Nigeria

The development of Tinapa Business Resorts is undertaken using PPP arrangement under the arrangement; the public sector is promoting the project and providing infrastructures

such as roads, water, sewage and power, while ownership and management is by the private sector.

2.5 Legal Framework for PPP

PPP typically involves complex commercial and financing arrangements and several stakeholders with conflicting interests. Consequently, a viable PPP can only thrive alongside a reliable, effective and predictable legal system where the rule of law prevails and contractual commitments are upheld.

It is interesting to note that the ICRC (Infrastructure Concession Regulatory Commission) Act came into effect before the policy rather than what is the norm for laws to be based on a policy. This was not the case with ICRC Act, the law was passed before a policy came into being. This is because of the importance of infrastructure to our national economy.

The ICRC Act serves as a legal and regulatory framework for public private partnerships. It is also the principal law in this respect which essentially provides for the participation of the private sector in financing the construction, development, operation and maintenance of infrastructure or development projects of the Federal Government of Nigeria through concession or other contractual arrangements.

The infrastructural investment targets include power generation, utilities (gas and electricity transmission, telephone services, transport facilities) related utilities, social service, prisons, hospitals, schools, water supply etc. The ICRC Act, is in addition to the fiscal Responsibility Act 2007, the public procurement Act 2007, the privatization and commercialization Act 1999 and other relevant legislations.

According to Afolabi (2011), there should be an amendment of the existing legislation or the enactment of new legislation to adequately provide a strong legal and regulatory framework for PPP for the following reasons:

1. Ensure that there is an effective dispute resolution – process which can operate independently and in a timely manner to provide alternative procedures such as arbitration – and expert determination.
2. Ensure that the regulation and licensing of public service operators and operations is transparent, timely and effective.
3. Provide for transparent, efficient and competitive procurement procedures for PPP type contracts that encourage innovation from bidders and allow dialogue to optimize the allocation of risks between the contracting parties.
4. Provide appropriate remedies for protecting the safety and integrity of public infrastructure from vandalism and their criminal activity.
5. Ensure that public authorities are empowerment to enter into agreements for the implementation of privately financial infrastructure projects and can delegate their statutory functions to private company.
6. Ensure that there are no distortions created by existing tax, banking, company or any other laws that would bias the investment option or would distort the commercial decisions of PPP investors or operators.
7. Create a centre of PPP expertise within ICRC (the PPP resource centre) to issue guidance to all public authorities on the procurement of PPP projects and drafting of PPP contracts.
8. Ensure that the proposed institutional and financial framework for PPP and the issuance of guarantees, partial risk insurance or other financial instruments by or through the Federal Government is consistent with the Fiscal Responsibility Act 2007, and other corresponding legislation proposed or enacted in each state i.e. Lagos State Roads, Bridges and Highway Infrastructure (Private Sector Participation) Development Board Law.

2.6 Transparent and Fair Bidding and Selection Process

The process of selecting a project proposal should be done according to criteria understood and recognized by all potential project sponsors, which is either reflected in legislation or memorialized in formal requests for proposals. Specific procedures comprising any such process must be executed in a manner of fairness. A framework law provides greater stability and predictability. Including providing government officials with clear guidance as to the procedures to be followed and the parameters within which negotiations are to be concluded (Dahiru and Abdulaziz 2010).

Depending on the laws of the host country, the award of a particular contract may be done pursuant to direct negotiations with a sole bidder (through an unsolicited bid or otherwise). It is assumed that the selection of a project sponsor occur through a public solicitation of tenders.

The interest of the host government and the private sponsors coincide with respect to the bidding and selection process in that both desire to maintain a transparent and fair process to ensure the efficient selection of the best candidate based on merit and to create confidence in the certainty and vulnerability of the award.

Any award based on considerations met openly recognized and addressed by all participants would likely result in the granting of the project to a candidate met best qualified for the project and also render the award vulnerable to collateral attack.

The host government should avoid corruption or any other non-merit based criterion having an influence on the selection process in order to promote the project sponsors best able to deliver the requirements of the project. The private sponsor desire transparency and fairness to avoid being precluded from project on the basis of factors over which they have no control or awareness (Ibrahim 2007).

The complexity and size of PPPs generally have the effect of making the bidding process both time-consuming and costly. As a result, private sponsors will only bid if they are confident that the above considerations are recognized by the host government and that the proposed project is commercially sound and has the necessary political support. The host government should therefore prepare for the project adequately before starting the bidding process. In particular, the host government should consider if it is willing to implement the measures; including legislative and regulatory reforms needed to create the requisite confidence for the project among potential bidders. Although not widely practiced, the host government may wish to consider, as a means of conveying seriousness of intent, offering bidders who are short-listed but not awarded the project, some financial compensation for their costs and efforts.

2.7 Negotiation Process

After assessment of initial tender proposals, the client may conduct negotiations with the tenderers to achieve better value. Tenderers may be requested to submit one or more revised proposals in accordance with the requirements raised by the client during the negotiations. Tender assessments are updated as the negotiation clarification/negotiation and unplanned resubmission/revision of tenders. This practice of negotiation for best value has been conducted in Hong Kong and the UK. In the UK, the public client arranges general discussions with shortlisted tenderers regarding their tenders after preliminary assessment. The client then requests tenderers to produce best and final offers (BAFOS), which are the tenderers last and formal proposals and are clearly defined and further improved by including all points made during the course of general discussions. Following the assessment and ranking of the BAFOS, the client will name and conduct negotiations with the preferred tenderes on particular achieving a mutually

acceptable contract that reflects the preferred tenderness tolerance for risk and preferences for the reward structure (Zhang et al,2002).

2.8 Project Sponsors and Concessionaires attributes

2.8.1 Concessionaires Attributes

Ahadzi and Bowles (2004) identified and categorized 28 attributes affecting contract negotiation of the private sector for PPP contract under three groups which include

2.8.1.1 Organizational Nature and Strength

1. Appointing a dedicated bid manager
2. Ability to understand what the public sector want.
3. Open/frank communication during the negotiation
4. Early involvement of other stakeholders
5. Ability of consortium members to work harmoniously
6. Readiness to accept risk.
7. Ability to persevere during protracted negotiation
8. Previous experience in PPP procurement
9. Personal attributes of the champion within the consortium
10. Willingness to commit to earlier negotiation terms
11. Reputation enjoyed by the consortium
12. PPP being a strategic business interest
13. Ability to tie equity into the project for a long period
14. The multidisciplinary nature of consortium team
15. Experience of previously working together as a team
16. Ability to obtain planning permission timorously
17. Taking proactive role in initiating the project
18. Current job holding of consortium members

19. Experience of previously working with the public sector procurer

2.8.1.2 Quality of Technical Proposal

1. Clarity of submissions and responses to queries
2. Robustness of outline technical proposal
3. Provision of sound technical guarantee
4. Innovate technical solutions

2.8.1.3 Quality of Financial Proposal

1. Level of exposure of the public sector organization to financial risks
2. Level of financial guarantees provided/proposed by the consortium
3. Length of concession period proposed
4. Level of financial returns to the public sector organization
5. High equity/debt ratio so as to drive commitment
6. Level of third party revenue to be generated

2.8.2Project Sponsors attributes

Ahadzi and Bowles (2004) identified and categorized 24 attributes affecting contract negotiation of the public sector for PPP contract under three groups:

2.8.2.1 Organization Capabilities

1. Top-level committeemen within the public sector organization
2. Level of collaboration and commitment among the public sector team
3. Open/frank and flexible communication during negotiation
4. Level of bureaucracy in the decision making process
5. Level of committeemen of the organization to earlier negotiation terms
6. Ability to accept and absorb risks
7. Ability to assist in land acquisition/planning permission
8. Attitude to cast e.g excessive desire to drive down coast

9. Ability to tap PPP knowledge and expertise elsewhere
10. Existence of an established PPP/Private Finance Unit
11. Level of reputation enjoyed by the organization.

2.8.2.2Technical Capabilities

1. Ability to effectively establish the project parameters
2. Strong in-house expertise in infrastructure procurement
3. Levels of preparatory work
4. Ability to establish clears statements of the evaluation criteria
5. Previous experience in infrastructure procurement generally
6. Making use of standard bidding documents
7. Previously experience in PPP/Private finance infrastructure procurement.

2.8.2.3 Financial Capabilities

1. Capability to pay the shadow tolls/tariff proposed
2. Ability to receive financial support/guarantees from the central government
3. Ability to offer tax concession and/or flexible tax regimes
4. Ability to raise funds through Boards
5. Ability to provide equity finance.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter outlines the method adopted for the research work; the information needed for this research was obtained from literature and questionnaire survey.

3.1 Research Design

The 52 negotiation attributes for both project sponsors and concessionaires were included in a research instrument. The questionnaire comprised two sections; section A contains questions about respondent background and experience and section B contains questions about key attributes of Projects Sponsors and Concessionaires of PPP contract negotiation. This study presents the analysis of the survey response data relating to the perceived relative significance of the PPP contract negotiation attributes based on a five-point Likert rating scale ranging from 1 “insignificant” to 5 “extremely significant”. This type of scale has been used in both general construction management research and in PPP studies reported by Li et al (2005) and Ibrahim *et al* (2006).

3.2 The Study Population

In order to ensure that adequate and reliable data are generated, it is necessary to have a sample that is homogeneous and comprehensive which gives the true representation of the population. Hence the target populations of this study were the construction professionals with PPP experience working in both private and public sectors and contractors in Kaduna. The identity of participants involved during negotiation of PPP project were obtained from staff of Abuja Investment and Property Development Company (AIPDC), AIPDC is one of the leading promoters of PPP in Nigeria.

3.3 Sample Size and Sampling Techniques

Due to lack of adequate literature as the database of organizations involved in PPP projects in Nigeria (probably because the procurement method is still at an evolutionary stage). In establishing the sample size, the research adopted an approval outlined by Cochran (1963) for infinite populations; the equation below is expected to yield a representative sample for the populations, which is valid for this research as a result of its infinite population size. Below is the equation adopted.

$$n_0 = \frac{Z^2 P_q}{e^2}$$

Where

$n_0$is the sample size

$Z^2$is the abscissa of the normal curve that cuts off an area α at the tails (1- α) equals the desired confidence level.

e is the desired level of precision

p is the estimated proportion of an attribute that is present in the population, and

q is 1-p

the value for z is found in statistical tables which contain the area under the normal curve.

In this research, it is assumed that there Isa large population with an unknown variability in the proportion; therefore, the research considers p = 1 (minimum variability)

The research used a desired confidence level of 95% (Z value of 1.960 precision).

$$n_0 = \frac{1.96^2 \times 0.1 \times 0.9}{0.05^2} = 138$$

Therefore the population size $n_0$will be 138 construction professionals

A purposive sampling technique was adopted due to the fact that it is a type of non probability sampling that is most effective when one needs to study a certain cultural

domain with knowledgeable experts within. Purposive sampling may also be used for both qualitative and quantitative research techniques. Dolores and Tongco (2007) defined Purposive Sampling Technique wich is also called Judgement sampling as the deliberate choice of an informant due to the qualities the informant possesses. It is a non random technique that does not need underlying theories or a set number of informant. Simply put, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience.

3.4 Data Collection Instruments and Procedures

The questionnaires were administered to 138 construction professionals (including consultants, contractors, clients and academics) involved in construction in Nigeria. Section A of the questionnaire contained the background information of the respondents in respect of qualification, experience and other related issues that could assist the researcher to ascertain the reliability of the information provided. Section B provided the respondents the opportunity to assess their perception on the attributes of Projects Sponsors and Concessionaires ofPPP projects. The five levels of scoring were; "Extremely Significant(ES)" (5 points), "Very Significant(VS)" (4 points), "Significant(S)" (3 points), "Slightly significant(VS)" (2 points) and "Insignificant(IS)" (1).

3.5 Questionnaire Response

In all, 86 questionnaires were returned out of which 71 were found suitable for analysis. This represents a 52% effective response rate. Twenty-one (21) of the respondents primarily worked in the public sector, Eighteen were consultants, Nine were private sector (non-governmental organization), Four were contractors and Nineteen were academics involved in teaching and research. Unlike in many developed countries,

Academics are often appointed in developing countries such as Nigeria, to provide advisory roles to the public sector on PPP schemes, and have been accordingly classified as public sector respondents. The responses from fifteen respondents that do not have PPP experience were discarded. Consequently, the responses from the public and private sectors were 40 and 31 respectively. The relatively small size of responses may be because the development of PPP procurement system is still in the formative stages in Nigeria. Although a small sample generally precludes some types of statistical tests of significance, the effective response rate of 52% is not unusual for this type of survey; for example similar questionnaire surveys in the UK by Li *et al* (2005) received only a response rate of 12% while Ibrahim *et al* (2006) received a response rate of 24% in Nigeria. Furthermore, based on assertion of Moser and Kelton (1971) the result of a survey could be considered significant if the response rate is not lower than 30-40%.

3.6 Method of Data Analysis

Appropriate methods of data analysis are very necessary to process the data collected from field survey. Data analysis, where necessary could involve the use of multiple analytical techniques to facilitate the ease of communicating the results while at the same time improving its validity (Ajayi 1990). Based on this assertion, the ranking of the attributes of Projects Sponsors and Concessionaires of PPP contract negotiation was based on mean score . A lower value indicates a lower level of significance. For interpretation purpose, the mean score of 1 indicates "Insignificant", 2 "Strongly Significant" 3 "Significant", 4 "Very Significant" and 5 Extremely Significant". Although the use of arithmetic mean suggest treating Likert scale-based as an interval of measurement, the mean scores should not deemed as "quantities" to show how much more important each factor is then the other, but as "indicators" to establish a rank order of importance for the factor (Idrus and Newman, 2002). For example, if the score of a

particular variable is 2.2, then it could be interpreted that the variable is perceived to be between “slightly significant” and “Significant” but tend towards being “slightly significant. The analysis also showed the standard deviation (SD) of the responses and it measures the variability or dispersal of responses. It demonstrates how clustered the response values are around the means for each attribute. Spareman’s correlation index was used in comparing the opinions of the two sectors, while Analysis of Variance (ANOVA) was used in determining the effect of responses on the basis of their type of organization. This is because more than two groups are involved based on type of organization

CHAPTER FOUR

DATA ANALYSIS: PRESENTATION AND DISCUSSION OF RESULTS

4.1 Preamble

The study is titled "Perceptions of Construction Professionals on attributes of Project Sponsors and Concessionaires of PPP projects in Nigeria" Statistical analysis using SPSS 20th edition was carried on the data generated. A total of 71 respondents' views were analysed. The analysis was presented in sections for easy comprehension. The first section presents the data analysis of the bio data variables and nominal variables in frequencies and percentages. The Second part presents the responses of construction professionals on the influencing attributes of the PPP contract negotiation. The cumulative mean responses in each section is compared with the decision mean of 3.000 (using the Likert scale formula of [(5+4+3+2+1)/5]) to determine agreement or disagreement of respondents. The summary of all the major findings was also presented.

4.2: Attributes of the Respondents of the study.

Respondent's Profession

The respondent's classification according to their profession shown in table 4. 1 indicates that 18 or 25.4% are Architects while 13 or 18.3% are in the Engineering profession as against 21 or 29.6% that are in Building, while 18 or 25.4% are in Quantity surveying profession and the rest 1 or 1.4% is in other profession

Table 4.1: Respondent's Profession

Profession	Frequency	Percent
Architecture	18	25.4
Engineering	13	18.3
Building	21	29.6
Quantity surveyor	18	25.4
Others	1	1.4
Total	71	100.0

Educational Qualification of Respondents

According to table 4. 2 above, 16 or 22.5% of the respondents have the Higher National Diploma Certificate while 31 or 43.7% possess the Bachelors Degree as against 18 or 25.4% that have their Masters and the rest 6 or 8.5% possess their Doctorate degree

Table 4.2: Educational Qualification of Respondents

Qualification	Frequency	Percent
Higher National Diploma	16	22.5
Bachelors Degree	31	43.7
Masters	18	25.4
Doctorate degree	6	8.5
Total	71	100.0

Types of Organization

Respondents according to organization in table 4. 3 indicates that a total of 21 or 29.6% are in the consultancy while 22 or 1.0% are in the Public sector as against 6 or 8.5% that are in the Private sector (providers) while 19 or 26.8% are in the Academics and the rest 3 or 4.2% are in the contracting organization. This shows that majority of the respondents are in the Public sector (client) or in the Academic organizations.

Table 4.3: Types of Organization

Organization	Frequency	Percent
Consultancy	21	29.6
Public (government parastatals)	22	31.0
Private sector (providers)	6	8.5
Academics	19	26.8
Contracting	3	4.2
Total	71	100.0

Source: Field survey (2015)

Respondents position within their organization?

Table 4. 4 showed that 15 of the respondents representing 21.1% are top management staff while 50 or 70.4% are middle management staff as against 6 representing 8.4% that is lower management staff. This shows that an over whelming majority of them are middle management staff.

Table 4.4: Respondents position within their organization?

Status	Frequency	Percent
Top management	15	21.1
Middle management	50	70.4
Lower management	6	8.4
Total	71	100.0

Source: Field survey (2015)

Years of Experience on Public Private Partnership Project.

It is observed from table4.5 that 10 or 14.1% of the respondents have between 0 – 3 years working experience while another 9 or 12.7% have between 4-6 years as against 22 or 31.0% that have been working for between 7-9 years and the rest 30 or 42.3% have been working for over 10 years. This implies that majority of the respondents have long years of working experience.

Table4.5: Years of Experience on Public Private Partnership Project.

Experience (year)	Frequency	Percent
1-3 yrs	10	14.1
4-6 yrs	9	12.7
7-9 yrs	22	31.0
10 yrs and above	30	42.3
Total	71	100.0

Source: Field survey (2015)

SECTION TWO: THE LEVEL OF SIGNIFANCE OF THE INFLUENCING ATTRIBUTES

4.3 Relative Significance of Concessionaires Attributes

The result in table 4. 6 indicates that the cumulative/grand mean response of the 19 respondents identified is 3.424 which is higher than the decision mean of 3.000.This implies that the respondents' responses in this regard is positive. Specifically appointing a dedicated bid manager is the best quality of organizational nature and strength as this item one attracted the highest item mean response of 3.591 . In the same vein they are also of the opinion that ability to understand what the public sector wants is also important in assessing the nature and strength of an organization as this item two attracted the second highest mean response of 3.774 with details showing that while 15 were in strong agreement, 25 were in agreement as against the remaining 31 that neither agree nor disagreed. The readiness of an organization to accept risk is another factor in the nature and strength of an organization as this item six attracted the third mean response of 3.647 with details revealing that 15 of them were in strong agreement, while 25 were in agreement as against 22 that disagreed

while the rest 9 disagreed with this statement. In conclusion therefore on the rating of the nature and strength of an organization depends on , appointing a dedicated bid manager, ability to understand what the public sector wants and The readiness of an organization to accept risk

Table 4.6: The Organizational Nature and Strength

Items	Response categories					MEAN	STD	Rankings
	ES	VS	S	SS	I			
Appointing a dedicated bid manager	12	30	20	6	3	3.591	1.008	1
Ability to understand what the public sector wants.	15	25	31	0	0	3.774	.778	2
Readiness to accept risk.	15	25	22	9	0	3.647	0.957	3
Willingness to commit to earlier negotiation terms	15	27	19	4	6	3.577	1.142	4
Experience of previously working with the public sector procurer.	6	38	18	9	0	3.577	0.822	5
Open/frank communication during the negotiation	15	27	16	10	3	3.577	1.104	6
Early involvement of other stakeholders	3	34	28	5	0	3.478	.714	7
PPP being a strategic business interest	12	24	21	14	0	3.478	0.997	8
Ability to obtain planning permission timeously	9	25	27	10	0	3.464	0.891	9
Ability to persevere during protracted negotiation	15	18	25	10	3	3.450	1.105	10
Current job holding of consortium members	3	37	18	13	0	3.422	0.839	11
The multidisciplinary nature of consortium team.	9	27	22	7	6	3.366	1.098	12
Ability to tie equity into the project for a long period	9	24	24	11	3	3.352	1.029	13
Experience of previously working together s a team	12	14	33	12	0	3.336	0.959	14
Taking proactive role in initiating the project	12	19	22	12	6	3.267	1.182	15
Ability of consortium members to work harmoniously	3	30	21	17	0	3.267	0.877	16
Previous experience in PPP procurement	15	9	28	10	9	3.154	1.272	17
Personal attribute of the champion within the consortium	15	3	40	4	9	3.154	1.202	18
Reputation enjoyed by the consortium	9	21	18	17	6	3.140	1.174	19
Cumulative/grand mean						***3.424***		

Source: Field survey (2015) ***Decision mean = 3.000***

Perception of Respondents on the Level of Quality of Technical Proposal

The results in table 4.7 revealed the level of Quality of Technical Proposal which is above average as the cumulative mean response of 3.598 was found to be higher than the decision mean of 3.508 with details showing that Robustness of outline technical proposal has the highest mean response of 3.859 with details showing that while 21 were in strong agreement, 31 agreed as against 10 that neither agreed nor disagreed, while 6 disagreed and the rest 3 in strong disagreement with this statement. It was also noticed that respondents believe that the Provision of sound technical guarantee is the next important quality of technical proposal with the second highest mean response of 3.633 with details showing that 18 strongly agreed, 27 agreed, as 12 neither agreed nor disagreed, as against 12 disagreed and the rest 3 strongly disagreed. This information shows that the main Quality of Technical Proposal are Robustness of outline technical proposal and Provision of sound technical guarantee

Table 4.7: Perception of Respondents on the Level of Quality of Technical Proposal

	Items	Response Categories					MEAN	STD	Rankings
		ES	VS	S	SS	I			
	Robustness of outline technical proposal	21	31	10	6	3	3.859	1.072	1
	Provision of sound technical guarantee	18	27	11	12	3	3.633	1.161	2
	Clarity of submissions and responses to queries	15	23	24	6	3	3.577	1.051	3
	Innovate technical solutions	9	23	21	18	0	3.323	0.996	4
	Cumulative mean						3.598		

Source: Field survey (2015) **Decision mean = 3.000**

Perception of respondents on the Quality of financial Proposal

Level of financial guarantees provided/proposed by the consortium has the highest mean response of 3.267 as indicated in table 4.8. The details showed that 9 were in strong agreement, while 25 agreed, 16 neither agreed nor disagreed as against 18 that disagreed and the rest 3 strongly agreed. Secondly they strongly believe that Level of financial returns to the public sector organization affects the Quality of financial Proposal as this item attracted the highest mean response 3.211 with details showing that while 6 strongly agreed, 19 agreed while 33 neither agreed nor disagreed while 10 disagreed and the rest 3 strongly disagreed. The grand mean response on all the six item was 3.077 which was found to be higher than the decision mean of 3.000 implying that their response on Quality of financial Proposal is positive. In summary, level of financial guarantees provided/proposed by the consortium and Level of financial returns to the public sector organization have the highest impact on the Quality of financial Proposal of Public Sector Client Attributes

Table 4.8: Perception of respondents on the Quality of financial Proposal

Items	Response Categories					MEAN	STD	Rankings
	ES	VS	S	SS	I			
Level of financial guarantees provided/proposed by the consortium	9	25	16	18	3	3.267	1.107	1
Level of financial returns to the public sector organization	6	19	33	10	3	3.211	0.939	2
Level of exposure of the public sector organization to financial risk.	9	15	28	16	3	3.159	1.050	3
High Equity/debt ratio so as to drive commitment	3	21	28	16	3	3.070	0.930	4
Length concession period proposed	6	12	32	17	4	3.000	0.971	5
Level of third party revenue to generated.	3	15	25	18	10	2.760	1.075	6
Cumulative mean						***3.077***		

Source: Field survey (2015) ***Decision mean = 3.000***

4.4 RELATIVE SIGNIFICANCE OF PROJECT SPONSORS ATTRIBUTES

Perception of Respondents on level of Public Sector Client Attributes – Organizational Capabilities

Table 4.9 presents the perception of respondents on the level of Public Sector Client Attributes – organizational capabilities, that their response is on the positive as the cumulative mean of 3.304 was found to be higher than the decision mean of 3.000. Specifically they believe that Level of reputation enjoyed by the organization is the highest organizational capability affecting public sector client attributes as it attracted the highest mean response of 3.633 as details show that while 12 strongly agree 31 agree as

against 12 that neither agree nor disagree while 4 disagreed and the rest 3 strongly disagreed. Another strong attribute of organizational capability is the Ability to assist in land acquisition/planning permission, this item attracted the second highest mean response of 3.436 with details showing that 16 of them strongly agreed, 18 agreed, 21 neither agree nor disagree, while 13 disagreed as against the rest 3 that strongly disagreed. In conclusion, the Level of reputation enjoyed by the organization and ability to assist in land acquisition/planning permission are the most important organizational capabilities that affect the Public Sector Client Attributes.

Table4.9: Perception of Respondents on level of Public Sector Client Attributes – Organizational Capabilities

Items	Response categories					MEAN	STD	Rankings
	ES	vs	S	SS	I			
Level of reputation enjoyed by the organization	12	31	21	4	3	3.633	0.974	1
Ability to assist in land acquisition/planning permission	16	18	21	13	3	3.436	1.155	2
Ability to accept and absorb risks	19	9	28	9	6	3.366	1.244	3
Top-level commitment within the public sector organization	9	21	25	16		3.323	0.967	4
Level of bureaucracy in the decision making process	12	22	16	18	3	3.309	1.153	5
Attitude to cast e.g. excessive desire to drive down coast	13	18	21	12	7	3.253	1.227	6
Open/frank and flexible communication during negotiations.	9	22	18	21	1	3.239	1.061	7
Level of commitment of the organization to earlier negotiation terms	9	25	15	18	4	3.239	1.139	8
Ability to tap PPP knowledge and expertise elsewhere	10	21	18	19	3	3.225	1.123	9
Existence of an established PPP/private finance unit	4	27	27	7	6	3.225	1.002	10
Level of collaboration and commitment among the public sector team	3	25	25	12	6	3.096	1.016	11
Cumulative/grand mean						3.304		

Source: Field survey (2015) **Decision mean =3.000**

Perception of Respondents on level of Public Sector Client Attributes – Technical capabilities

It is observed from table 4. 10 that the perception of respondents on level of Public Sector Client Attributes – Technical capabilities, that their response is on the positive as the cumulative mean of 3.434 was found to be higher than the decision mean of 3.000. Specifically they believe that Ability to effectively establish the project parameters is the highest technical capability affecting public sector client attributes as it attracted the highest mean response of 3.577 as details show that while 15 strongly agree 31 agree as against 12 that neither agree nor disagree while 6 disagreed and the rest 7 strongly disagreed. Another strong effect of technical capability is Previous experience in infrastructure procurement generally, this item attracted the second highest mean response of 3.549 with details showing that 9 of them strongly agreed, 30 agreed, 23 neither agree nor disagree, as against the rest 9 that disagreed. In conclusion Ability to effectively establish the project parameters and having previous experience in infrastructure procurement generally are the most important technical capabilities of Public Sector Client Attributes.

Table 4.10: Perception of Respondents on level of Public Sector Client Attributes – Technical capabilities

Items	Response categories					MEAN	STD	Rankings
	ES	VS	S	SS	I			
Ability to effectively establish the project parameters	15	31	12	6	7	3.577	1.203	1
Previous experience in infrastructure procurement generally	9	30	23	9	0	3.549	0.874	2
Strong in-house expertise in infrastructure procurement	6	37	18	7	3	3.507	0.939	3
Previous experience in PPP/private finance infrastructure procurement	10	30	18	10	3	3.478	1.040	4
Ability to establish clears statement of the evaluation criteria	21	9	31	0	10	3.436	1.306	5
Level of preparatory work	6	24	25	15	1	3.257	0.940	6
Making use of standard bidding documents	3	24	34	7	3	3.239	0.852	7
Cumulative/grand mean						**3.434**		

Source: Field survey (2015) **Decision mean=3.000**

Perception of respondents on level of Public Sector Client Attributes – Financial capabilities

Table 4.11 showed the level of Public Sector Client Attributes – Financial capabilities, and what can be deduced is that financial capabilities have significant effect on public sector client attributes. This is because the calculated cumulative/grand mean on the five items was 3.506 was found to be higher than the 3.000 decision mean. Specifically,

item three which state that "Ability to offer tax concession and/or flexible tax regimes" has the highest effect as this item attracted the highest mean response of 3.732 with details showing that 22 considers it extremely significant, while 18 consider it very significant as against 21 that considers it significant while the rest 10 considers it slightly significant. In the same vein item one which state that "Capability to pay the shadow tolls/tariff proposed" has effect as this item attracted the second highest mean response of 3.690 with details showing that while 13 considers it extremely significant, 36 considers it very significant as against 9 that considers it significant and the rest 13 considers it slightly significant. Therefore the ability to offer tax concession or flexible tax regime and Capability to pay the shadow tolls/tariff proposed are the most financial capabilities that affect the PPP contract negotiation.

Table 4.11: Perception of respondents on level of Public Sector Client Attributes – Financial capabilities

Items	Response categories					MEAN	STD	Rankings
	ES	VS	S	SS	I			
Ability to offer tax concession and/or flexible tax regimes	22	18	21	10	0	3.732	1.055	1
Capability to pay the shadow tolls/tariff proposed	13	36	9	13	0	3.690	0.979	2
Ability to receive financial support/guarantees from the central government	16	18	27	9	1	3.549	1.025	3
Ability to raise funds through boards	9	25	15	22	0	3.295	1.047	4
Ability to provide equity finance.	10	18	27	13	3	3.267	1.055	5
Cumulative mean						3.506		

Source: Field survey (2015) **Decision mean=3.000**

4.5 Perceptual Differences

Objective two of the research has been accomplished using Spearman s correlation (r) in table 4. 12 which presents the perceptual differences between public and private sector respondents on the attributes of Concessionaire and Project Sponsors attributes. Which showed that in Organizational nature and strength their cumulative mean perceptions were 60.8000 and 56.9512 by private sector and public sector respondents respectively and their calculated significance (p) value was 0.001at a correlation index r level of 0.799, meaning that there is significant relationship between the two sectors.On Quality of Technical proposal their cumulative mean perceptions were 14.8000 and 14.0976 by public sector and private sector respondents respectively and their calculated significance (p) value was 0.205 meaning that there is no significant relationship between the two sectors. On Quality of Financial Proposal their cumulative mean perceptions were 40.5000 and 42.1707 by private sector and public sector respondents respectively and their calculated significance (p) value was 0.091 meaning that there is no significant relationship between the two sectors. The table showed that in organizational capabilities their cumulative mean perceptions were 35.7000 and 36.8203 by private sector and public sector respondents respectively and their calculated significance (p) value was 0.019 at a correlation index r level of 0.528 meaning that significant relationship exist between the two sectors. The table also showed that in technical capabilities their mean cumulative perceptions were 23.800 and 24.2439 by private sector and public sector respondents respectively and their calculated significance (p) value was 0.002 is lower than the 0.05 alpha level at a correlation index r level of 0.606 implying that significant relationship exist between the two sectors. The table showed that in quality of financial capabilities their cumulative mean

perceptions were 18.1000 and 17.1220 by private sector and public sector respondents respectively. The calculated significance (p) value was 0.006 at a correlation index r level of 506, this implies that there is significant relationship between the two sectors.

Table 4.12: Perceptual differences between the public and Private sector Respondents on the attributes of Project Sponsors and Concessionaire Using Spearman's Correlation index (r).

Item	Type of respondents	N	Grand mean	Standard mean	df	Spearman Correlation index r	P VALUE	Remarks
ORGANIZATIONAL_NATURE_AND_STRENGTH	PRIVATE	30	3.424	3.0	69	0.799**	0.001	Significant,
	PUBLIC	41						
QUALITY_OF_TECHNICAL_PROPOSAL	PRIVATE	30	3.598	3.00	69	0.198	0.205	Not Significant
	PUBLIC	41						
QUALITY_OFINANCIAL_PROPOSAL	PRIVATE	30	3.077	3.00	69	0.186	0.091	Not Significant
	PUBLIC	41						
ORGANIZATIONAL_CAPABILITIES	PRIVATE	30	3.304	3.0	69	0.528**	0.019	Significant
	PUBLIC	41						
TECHNICAL_CAPABILITIES	PRIVATE	30	3.434	3.00	69	0.606**	0.002	Significant
	PUBLIC	41						
FINACIAL_CAPABILITIES	PRIVATE	30	3.506	3.00	69	0.506**	0.006	Significant
	PUBLIC	41						

***** correlation is significant at the 0.05 source: Field survey(2015)***

4.6 Effect of Respondents Type of Organization on the Attributes

Results of the Analysis of variance and the descriptive mean statistics (table 4.13) showed the differences among the general statistics below, the differences in the test items on the basis of respondent's type of organization. The Significant value (P) was compared with the F ration to determine their significant relationship. On Organizational nature and strength there is no significant differences on the basis of their type of organization. On Quality of Technical Proposal there is no significant difference among the respondents on the basis of their type of organization. On Quality of Financial proposal significant differences exist on the basis of their type of organization. On Organizational capabilities significant differences exist on the basis of their type of organization. On Technical capabilities there is no significant differences among the respondents on the basis of their type of organization. On financial capabilities significant differences exist among the respondents on the basis of their type of organization.

Table 4. 13; Analysis of variance of the effect of Respondents type of organisation on the attributes of Project Sponsors and Concessesionaires.

ANOVA

Item		Mean	Standard mean	Df	Mean Square	F ratio	Sig.	Remarks
ORGANIZATIONAL_NATURE_AND_ STRENGTH	Between Groups	3.424	3.0	4	217.679	1.411	.240	**Not significant**
	Within Groups			66	154.252			
	Total			70				
QUALITY OF TECHNICAL PROPOSAL	Between Groups	3.598	3.0	4	22.343	2.176	.081	**Not significant**
	Within Groups			66	10.266			
	Total			70				
QUALITY_OF FINANCIAL_PROPOSAL	Between Groups			4	103.928	9.527	.000	**Significant**
	Within Groups	3.077	3.0	66	10.908			
	Total			70				
ORGANIZATIONAL_CAPABILITIES	Between Groups			4	453.869	6.776	.000	**Significant**
	Within Groups	3.304	3.0	66	66.981			
	Total			70				
TECHNICAL_CAPABILITIES	Between Groups			4	32.653	1.297	.280	**Not significant**
	Within Groups	3.434	3.0	66	25.169			
	Total			70				
FINACIAL_CAPABILITIES	Between Groups			4	43.978	3.299	.016	**Significant**
	Within Groups	3.506	3.0	66	13.330			
	Total			70				
						.	.	

4.7 Discussion of Results

4.7.1 Public and Private Sectors Perceptions on the attributes of Project Sponsors and Concessionaires of PPP.

The result presented in tables4. 7 to 4. 12 showed rank order rating for key Project Sponsors and Concessionaire attributes identified as positively influencing the outcome of the negotiation processes while table 9 deals with the divergence in perceptions of both the private and public sectors on these influencing attributes.

The results presented in tables 4.7, 4.8, and 4.9 showed that the general perception of all respondents (rank order ratings) for attributes of tendering consortium that have a positive influence on negotiations. It can be seen that, in the group of attributes relating to the nature and strength of the consortium which includes a mix of hard organization and soft people issues; appointing a dedicated bid manager; ability to understand what the public sector wants and readiness of an organization to accept risk. The first and second ranked significant attributes are interrelated and has to do with the manager's ability to understand what the public sector wants. The third ranked significant attribute is the readiness of an organization to accept risk. In general terms, it has been established that risk should be allocated on the basis of ability to manage it. This way, the individual risk premium and overall/project cost should reduce because the party in the best position to manage a risk should be able to do so at the lowest possible price (Ibrahim *et al.*, 2006). Also Li *et al* (2005) recommended a strategic approach to risk allocation during project development.

In the group of attributes relating to the quality of technical proposal; Robutness of outline technical proposal comes first and provision of sound technical guarantee comes second in order of significance as both public and private sector parties are likely to be more comfortable with proven and well-understood solutions.

In the group of attributes relating to the quality of financial proposals, level of financial guarantee provided/proposed by the consortium is the most significant attributes while level of financial returns to the public sector organization comes second in order of significance.

Discussion of the results on the Project Sponsors attributes have similarly been broken into three groups. In the group of attributes relating to organizational capabilities, level of reputation enjoyed by the organization is rated as the most significant attributes followed by the ability to assist in land acquisition planning permission.

Within the technical capabilities group, the ability of the public sector to establish project parameters and prepare output specifications is most significant. Writing a comprehensive output specification of the services required from the project, rather than describing the asset, is one of the biggest differences for traditional public sector capital asset procurement (Ahadzi and Bowls 2004). It is clear that sound project specification and scoping are the bedrock of successful negotiations. Project parameters that change the scope will frustrate the progress of any negotiations. This is closely followed by having previous experience in infrastructure procurement which was also rated high; it is the significance of being able to use experience and expertise of others in guiding the procurement process. It seems much premium is placed on the use of knowledge or the experiences of others. Both the public and private sectors appears to have more concern about the experience, and by implications, ability and effectiveness of the body with which they will be negotiating and making decisions. Experience provides expertise through learning, which then reflects in the quality of the discussions during negotiations.

The ability to offer tax concession or flexible tax regime was rated high by both public and private sectors under the financial capabilities of the Project Sponsors attributes. It was closely followed by capability to pay the shadow tolls tariff proposed.

4.7.2 Perceptual differences between the public and private sectors on the influencing attributes of Projects Sponsors and Concessionaire

This part deals with the divergence in perception of both the private and the public sector respondents on the influencing attributes. The intention is to draw attention to those areas where there is strong divergence for both sides to work on if the desire to eliminate misunderstanding during tendering and negotiation phase of the PPP is to be achieved.

Based on the responses, there is agreement between the public and private sectors on the Quality of Technical Proposal and Quality of Financial Proposal groups of the Concessionaire attributes while there is significant difference between the two sectors on the Organizational nature and strength of the Concessionaire. There is also significance difference on all the three groups of Project Sponsors attributes which includes Organizational capabilities, Technical capabilities and Financial capabilities of the Project Sponsors.

4.7.3 Effect of Respondents type of organization on the attributes of the parties.

The effect of respondents profile on the basis of their type of organization revealed that there is complete agreement between the two sectors on Organizaational nature and strength, Quality of technical proposal and Technical capabilities groups of attributes. On the other hand, there was a significance difference between the opinions of the two sectors relating to Quality of financial proposal, Organizational capabilities and financial capabilities group of attributes. The public sector and Academic have the highest number of responses on these opinions.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

Based on the analysis of results, the key findings are summarized below:

Public and Private Sector Perception on the influencing attributes of Concessionaire

1. Relating to the nature and strength of an organization depends on appointing a dedicated bid manager, ability to understand what the public sector wants and the readiness of an organization to accept risk.
2. The main influential attributes of technical proposal and provision of sound technical guarantee.
3. Level of financial guarantees provided/proposed by the consortium and level of financial returns to the public sector organization have the highest impact on the quality of financial proposal of consortium attributes.

Public and Private Sector Perception on the influencing attributes of the Project Sponsors

1. Level of reputation enjoyed by the organization and ability to assists in land acquisition/planning permission are the most influencing attributes of organizational capability that affects the public sector client attributes.
2. Ability to effectively establish the project parameters and having previous experience in infrastructure procurements generally were rated high under technical capabilities that affects public sector client attributes.
3. The ability to offer tax concession or flexible tax regime and capability to pay the shadow tolls tariff proposed are the most financial capabilities that has the highest effect on PPP contract negotiation.

Perceptual differences between the public and private sector respondents,

Based on the findings, there is no significant difference between the public and private sector relating to quality of financial proposal and quality of technical guarantee while there is strong divergence on the remaining four groups of the influencing attributes affecting contract negotiation of Public Private Partnership projects in Nigeria.

Effect of Respondent's Type of Organization on the Attributes

Further analysis using ANOVA on the respondent's type of organization revealed that there is no significant difference on the opinion of the respondent's on quality of financial proposal and quality of technical proposal groups of attributes based on their type of organization.

5.2 Conclusions

The studyconcludes that;

1. The value of projects procured through PPP forms of procurement is growing internationally, as governments seek to involve private sector capital and method of working in the provision of wide range of infrastructure.
2. Problems at the bidding stage have become apparent with this form of procurement.
3. Many attributes contribute to the success of contract negotiation.
4. The general perception of both parties concluded that; Appointing a dedicated bid manager, Robutness of outline technical proposal and Level of financial guarantees provided/proposed by the consortium are considered the most significant attributes of the affecting PPP contract negotiation.
5. On the Client attribute, level of reputation enjoyed by organization, ability to effectively establish project parameters and the ability to offer tax concession or flexible tax regime are considered to be the most significant attributes affecting contract negotiation of the client for PPP project in Nigeria.

6. Further analysis shows that there is no significance difference on Quality of financial proposal and Quality of technical proposal groups of concessionaire attributes indicating agreement in the opinions of two sectors. While there is divergence in opinion of the two sectors on Organizational nature and strength, Organizational capabilities, Technical capabilities and financial capabilities groups of attributes.
7. The research revealed that there is agreement on the opinions of the two sectors on the basis of their type of organization, on three groups of attributes which includes ;Organizational nature and strength, Quality of technical proposal and Technical capabilities. On the the other hand, differences exists between the two sectors on Quality of financial capabilities groups of attributes.
8. Further analysis on the respondents type of Organization revealed that there is significant difference in the opinions of the respondents on financial capabilities, Organizational capabilities and Quality of Financial proposal groups of attributes.
9. Respondents suggested some general attributes namely; characteristics of the project itself political factors, social factor, organizational strategies and structures and good communication between the contracting partners.

5.3 Recommendations

Based on the major findings, the following recommendations are made.

1. The private sector should appoint a dedicated bid manager and able to understand what the public sector wants through several surveys.
2. There should be robust technical proposal through intensive analysis.
3. Private sector should provide adequate financial guarantee and monitor the financial returns for economic comparism of expenditure and revenue.

4. The public sector should strive to improve their reputation in the area as this goes a long way in attracting the private sectors.
5. Project parameters should be effectively established by the public sector to remove ambiguities and setbacks.
6. The public sector should be able to offer tax concession and/or flexible regime.

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QUESTIONNAIRE SURVEY

Department of Building,
Faculty of Environmental Design,
Ahmadu Bello University,
Zaria.

Dear Respondent,

Evidence from around the world and Nigeria shown that despite the increasing popularity in the use of the Public Private Partnership concept as a procurement strategy, there been problems associated with the tendering and negotiation of contracts between the public sector client and private sector developers.

Therefore, this questionnaire is designed to obtain relevant information for construction professionals engaged in Public Private partnership Procurement. It is part of an M.Sc thesis at the Ahmadu Bello University Zaria entitled "**perception of construction professionals on attributes of project sponsors and concessionaires of PPP projects in Nigeria"** with a view to identify a more productable and efficient bidding process.

While appreciating that you must be very busy, your participation in this survey is crucial to the success of this research, the information you provide will be kept in outmost confidentiality and shall be used strictly for academic purposes.

Yours faithfully,

Hauwa Hassan

SECTION A: RESPONDENTS PROFILE

1. Respondents profession (please thick one)

☐ Architecture ☐ Engineering ☐ Buildin ☐ Quality surveying

Others (please specify) _____

2. Highest level of educational qualification (please thick one)

☐ Ordinary National Diploma (OND) ☐ Higher National Diploma (HND)

☐ Post Graduate Diploma ☐ Bachelor Degree ☐ Masters

☐ Doctorate Degree ☐ Others (specify) _____

3. Categorization of individuals (with PPP experience)

☐ Consultant ☐ Public sector (client) ☐ private sector (providers)

☐ Academics ☐ Contractor ☐ Financial Adviser ☐

Others (specify) _____

4. Type of your organization _____

_____

5. Which of the following best describes your position within your organization

☐ Top management ☐ middle management ☐ owner management

6. Year of experience on public private partnership project.

☐ 1-3 years ☐ 4-6 years ☐ 7-9 years ☐ over 10 years

SECTION B:

The purpose of this section is to access your rating in order of information of the following groups of attributes for both private sector providers (consortium) and for the public sector client that significantly influence the outcome of PPP contract negotiation. Below each group of attributes are some blank spaces available to respondents in case they have their own suggested attributes that had not been covered in the provided questionnaire.

Please rate each of them by ticking the option that most significantly affects the outcome of the negotiation processes rating from 1 – 5 with:

1 = Insignificant (I)

2 = Slightly Significant (SS)

3 = Significant (S)

4 = Very Significant (VS)

5 = Extremely Significant (ES)

CONCESSIONAIRES ATTRIBUTES

GROUP	CONCESSIONAIRES ATTRIBUTES	Level of significance				
		1	2	3	4	5
I	**Organizational nature and strength**					
	Ability to understand what the public sector wants					
	Open/frank communication during the negotiation					
	Early involvement of other stakeholders					
	Ability of consortium members to work harmoniously					
	Readiness to accept risk					
	Ability to persevere during protracted negotiation					
	Previous experience in PPP procurement					
	Personal attribute of the champion with in the consortium					
	Willingness to commit to earlier negotiation terms					
	Reputation enjoyed by the consortium					
	PPP being a strategic business interest					
	Ability to tie equity into the project for a long period					
	The multidiscipline nature of consortium					
	Experience of previously working together as a team					
	Ability to obtain planning permission timeously					
	Taking proactive role in initiating the project					
	Current job holding of consorting members					
	Experience of previously working with the public sector procurer					
II	**Quality of technical proposal**					
	Clarity of submissions and responses to queries					
	Robustness of outline technical proposal					
	Provision of sound technical guarantee					
	Innovate technical solutions					
III	**Quality of financial proposal**					
	Level of exposure of the public sector organization to financial risks					
	Level of financial guarantee provided/ proposed by the consortium					
	Length of consortium period proposed					
	Length of financial returns to the public sector organization					
	Level of financial returns to the public sector organization					
	High equity/ debt ratio so as to drive commitment					
	Level of traffic revenue to be generated					

PROJECT SPONSORS ATTRIBUTES

GROUP	PROJECT SPONSORS ATTRIBUTES	Level of significance				
		1	2	3	4	5
I	**Public sector client attributes**					
	Top-level commitment with in the public sector organization					
	Level of collaboration and commitment among the public sector team					
	Open/ frank flexible communication during negotiation					
	Level of bureaucracy in the decision making process					
	Level of commitment of the organization to earlier negotiation teams					
	Ability to accept and absorb risk					
	Ability to assist in land acquisition/ planning permission					
	Attitude to cast e.g excessive desire to drive down coast					
	Ability to tap PPP knowledge and expertise elsewhere					
	Existence of an established PPP/ private finance unit					
	Level of reputation enjoyed by the organization					
II	**Technical Capabilities**					
	Ability to effectively establish the project parameters					
	Strong in-house expertise in infrastructure procurement					
	Level of preparatory work					
	Ability to establish clear statements of the evaluation criteria					
	Previous experience in infrastructure procurement generally					
	Making use of standard bidding documents					
	Previous experience in PPP/ private finance infrastructure procurement					
III	**Financial capabilities**					
	Capability to pay the shadow tools/traffic proposed					
	Ability to receive financial support/guarantees from the central government					
	Ability to offer tax concession and/or flexible tax regimes					
	Ability to raised funds through boards					
	Ability to provide equity finance					